

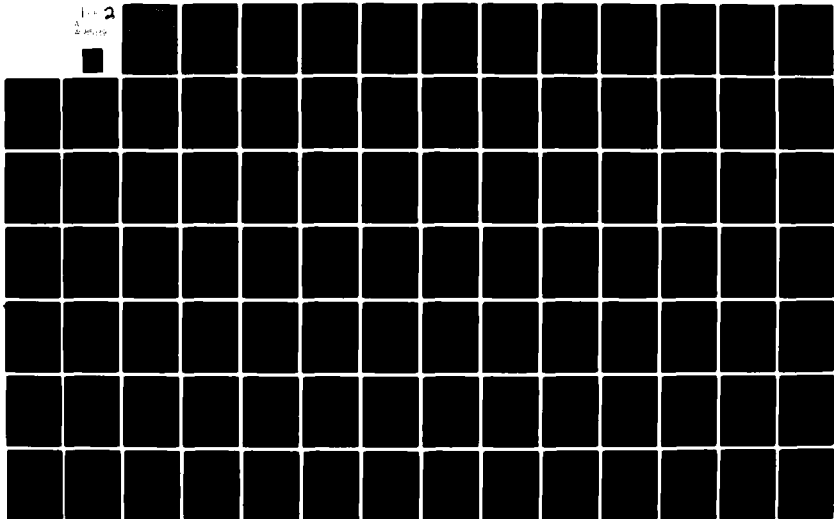
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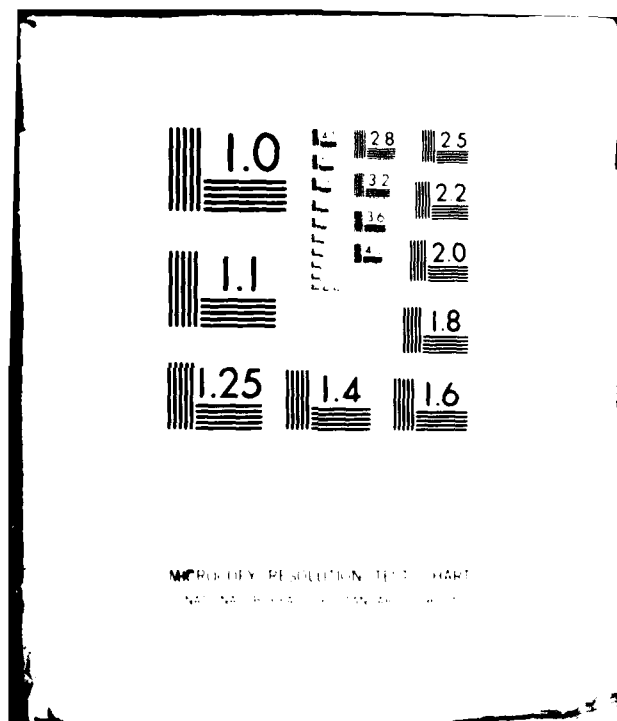
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SCIENTIFIC PERSONNEL RESOURCE INVENTORY: LIST AND INDEX TO RESE--ETC(U)  
JUN 72 C KERBY, A J MCERLEAN  
OLP/SI-REF-72-11

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**LEVEL II**

**SCIENTIFIC PERSONNEL RESOURCE INVENTORY:  
LIST AND INDEX TO RESEARCH SCIENTISTS  
INVOLVED WITH THE ESTUARINE ENVIRONMENT,  
ESPECIALLY THE CHESAPEAKE BAY**

ADA 085139

SI/OES 73

Compiled by

CATHERINE KERBY AND ANDREW J. McERLEAN

EPA

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ELECTE**  
JUN 6 1980

This project is supported by grants from the  
U.S. Army Corps of Engineers, Baltimore District,  
through the National Science Foundation to the  
Smithsonian Institution, the University of Maryland  
and the Virginia Institute of Marine Science

*Smithsonian  
Oceanographic + Limnology Program  
475-3*

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*OLP/SI Reference No. 72-11  
NRI Reference No. 72-83*

June 1972

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⑩ CATHERINE KERBY ANDREW J. McERLEAN

⑫ 127

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⑪ Jun 73

⑭ OI F / SI - REF - 72 - 2 I

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NRI Reference No. 72-83

June 1972

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## INTRODUCTION

The U. S. Army Corps of Engineers, Baltimore District, has launched an extensive review of the existing, social, economic, legal and environmental condition of the Chesapeake Bay. The objective of this review is the development of a plan to provide the Corps with the basic information required to permit the proper management of the Bay and its associated environs. As a part of the biological portion of this project, an effort was made to identify and inventory researchers, especially biologists, who are active in Chesapeake Bay research. Since the number of people involved in Bay research has increased greatly during the last decade, it has become impossible for a researcher in a particular discipline to personally know all other scientists with the same interests. Prior to this report, no recorded information existed that identified the estuarine community of scientists and their research capabilities and expertise. This information is fundamental to the present assessment of existing biological knowledge and to the future prospect of providing managers with useful data for prediction of possible effects of pollutants on the biota or to solve specific biological problems. Scientists can benefit from this inventory by becoming aware of other researchers and their interests. It will enable them to cooperate on projects with experts with similar interests and to avoid duplication of efforts.

Approximately 1200 workers were contacted in order to form this list, including members of the Chesapeake Research Consortium (CRC), the Atlantic Estuarine Research Society (AERS), the New England Estuarine Research Society (NEERS), and the National Shellfisheries Association, Inc. (NSA).

The questionnaire (pp. 186-187) which was sent to each researcher was a slightly modified version of the form which TRIGOM used in surveying personnel in preparing its second edition (May, 1971) of the Directory of Marine Research Facilities and Personnel in Maine. The modified questionnaire format includes the name of the researcher, highest degree, business address and phone number, and current estuarine research interests or areas of specialization in both descriptive terms and by keyword designations.

Although each individual was requested to check only three of these keywords, a number of respondents checked more. Since it was not possible to edit or qualify these choices, they were reproduced verbatim. Some editorial privilege, including condensing information, was exercised with replies to "current estuarine research interests or areas of specialization".

Replies to the questionnaires were indexed by general interest areas (letters) and subdivisions within these interest areas (numbers). Thus "B-8" indicates "(B) Biological Sciences, (8) Estuarine Ecology". Write-in notations for the category of "other" research interests were also indexed. Both

types of notations were keyed and indexed by numbers which were assigned to each specialist.

The first compilation of this list includes 644 researchers. Of this number, 314 have PhD degrees, 178 have Master's degrees, 105 have Bachelor's degrees, and nine have other types of degrees (including one with a MD and another with a VMD), and at least eight indicated that they will receive their PhD degrees shortly. Thirty-one scientists did not mention the highest degree they received (the notation -- indicates that no degree was given). In regard to the research interests as designated by keywords, the keyword "estuarine ecology" was checked by the most specialists, invertebrate biology was the next most popular category, followed by pollution research, marine biology (general), fisheries biology, environmental monitoring, and plankton ecology. Many specialists indicated interests in aquaculture, population dynamics, oceanography, biology of fishes, resource management, productivity, teaching and education and botany. Several researchers noted interests in micorbiology, water analysis, resource planning, physiology, commercial fishing, simulation modeling, biogeography, marine chemistry (general), parasitology, biochemistry, and sedimentology.

Fewer scientists mentioned the following interests: data systems, environmental legislation, engineering and instrumentation, pesticide monitoring, thermal properties, underwater diving, ornithology, marine geology (general), resource economics, hydrodynamics, vertebrate biology and hydrography. Only a few



specialists checked the keywords: geochemistry, physical engineering, physical properties, fish processing, health and medicine, organic chemistry, geochemistry, cold water biology, seaweed chemistry, seaweed extractives, human ecology, inorganic chemistry, marine physics (general), underwater photography, geomorphology, underwater acoustics, ocean law, navigation and seamanship, bioacoustics, geophysics, geochronology, mineralogy, and subsurface mapping. No scientists indicated specialities in geological engineering or electrical properties. One hundred and nineteen scientists specifically mentioned speciality areas other than the keyword designations provided.

This initial attempt at identifying estuarine specialists is definitely not complete. Unfortunately, a final date had to be set in order to meet a time deadline for this project. Other completed questionnaires have been received recently and should be included in an addendum to this inventory. It is recommended that this effort be continued in order that all qualified personnel be included in a future listing.

### ACKNOWLEDGEMENTS

Many people cooperated in responding to the questionnaires; their help is appreciated. Special thanks are due to the Estuarine Research Federation and the National Shellfisheries Association, Inc. for the use of their membership lists in determining personnel to contact, to I. Myra Siegel (Assistant to the Director of TRIGOM) who permitted us to use their questionnaire form and who was very cooperative with regard to our efforts, and to Anna Hegenberger who typed the final compilation.

\* 1

Aalto, Johan A.

MCE

Director  
Annapolis Field Office  
Environmental Protection Agency  
Annapolis Science Center  
Riva Road  
Annapolis, Maryland 21401  
(301) 268-5038 ext. 3

E-1, E-3, F-4

\* 2

Abbe, George Robert

MS

Biologist  
Department of Limnology  
Academy of Natural Sciences of Philadelphia  
Benedict Estuarine Laboratory  
Benedict, Maryland 20612  
(301) 274-3194

B-9, B-12, B-18

--Shellfish dynamics

--Epifaunal community studies

3

Abbott, Robert Tucker

PhD

Dupont Chair of Malacology  
Department of Mollusks  
Delaware Museum Natural History  
Box 3937  
Greenville, Delaware 19807  
(302) 658-9111

B-12

--Molluskan biology; including taxonomy, curating, sorting  
and housing

\* 4

Adams, Donald Dick

MSC

Assistant Professor  
Institute of Oceanography  
Old Dominion University  
Hampton Boulevard  
P.O. Box 6173  
Norfolk, Virginia 23508  
(703) 489-8000 ext. 456

C-1, C-3, E-3

--Decomposition of organic matter, especially plankton

--Carbon and nitrogen budgets

--Gas chromatography of trace gases dissolved in sea water

--Cycles of trace metals

--Cycles of low molecular weight hydrocarbons

- 5 Adams, Sidney Marshall MS  
 Biological Technician  
 Department of Commerce  
 National Marine Fisheries Service  
 3209 1/2 Arendell Street  
 Morehead City, North Carolina 28537  
 B-8  
 --Energetics of fish inhabiting Zostera marina communities;  
 including biomass sampling, respiration studies,  
 bomb colorimetry, and food consumption studies
- 6 Adler, Cyrus MS  
 President  
 Offshore Sea Development Corporation  
 99 Nassau Street  
 New York, New York 10038  
 B-2, E-3, G-5  
 --Shore processes  
 --Marshlands, including their growth and decline  
 --Thermal pollution  
 --Aquaculture of bivalves  
 --Biological indications of pollution  
 --Use of sludge to build up sand dunes
- \* 7 Allen, Linda Dye BS  
 Faculty Research Assistant  
 Natural Resources Institute  
 University of Maryland  
 Chesapeake Biological Laboratory  
 Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281 ext. 52  
 B-1, B-8, E-3, G-7  
 --Zooplankton; including pre-and post-operative studies  
 of thermal pollution by an atomic power plant and  
 biomass determinations of copepods, especially  
Acartia tonsa, A. clausi, and Eurytemora affinis
- \* 8 Allison, James Thurston BS  
 MGR Water Quality and Fish Mortality Studies -  
 Biologist 3  
 Water Quality Investigation and Enforcement Division  
 Maryland Department of Water Resources  
 11-13 Lincoln Court-Chinquapin Round Road  
 Annapolis, Maryland 21403  
 (301) 267-5675  
 B-1, B-5, B-8, B-9, B-12, B-13, B-17, C-1, C-9, E-1, E-3  
 --Pollution biology; including studies of water quality,  
 biota surveys, and plankton analyses  
 --Population studies of Orconectes virilis

9 Alperin, Irwin M. MS  
Executive Director  
Atlantic States Marine Fisheries Commission  
1717 Massachusetts Avenue, N.W.  
Washington, D.C. 20036  
(202) 232-6692

B-8, B-9, H-2

--Coordination of marine fishery research and management programs carried out by the state fishery agencies of the coastal states from Maine to Florida

--Fisheries biology, especially of species of fishes of particular interest to sport fishermen including striped bass, bluefish, weakfish, summer flounder, winter flounder and others in the vicinity of Long Island, New York and on the lower Hudson River; including studies of migratory behavior, seasonality, abundance and catch rates; investigation of the abundance and seasonality of all species of fishes inhabiting the surf zone of the south shore of Long Island, New York

\* 10 Andersen, Aven Mayer PhD  
Assistant Professor  
Natural Resources Institute  
University of Maryland  
College Park, Maryland 20742  
(301) 454-5641

B-9, B-18, G-6

--Fisheries biology; including dynamics of potential or currently-exploited fisheries resources of Chesapeake Bay and vicinity and studies of the beneficial uses of thermal waste in fish production

(11) Anderson, Franz E. PhD  
Associate Professor  
Earth Sciences  
University of New Hampshire  
Durham, New Hampshire 03824  
(603) 862-1718

D-1, D-8, E-2

--Factors affecting the suspended sediment load in estuarine waters; including the effect of waves in resuspending fine-grained sediment

- \* 12 Andrews, Jay Donald PhD  
 Senior Marine Scientist  
 Department of Malacology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 B-2, B-8, B-9, B-12  
 --Fouling Organisms  
 --Biological oceanography; experience with Corps on  
 dams, dredging, etc.  
 --Studies on Dermocystidium and Minchinia nelsoni (MSX)  
 --Molluskan biology; including genetics - breeding and  
 selection for superior oysters (disease resistance,  
 growth quality, breeding characteristics); adult  
 and larval ecology; taxonomy; setting, epizootology  
 --Management of shellfisheries
- 13 Arndt, Rudolf G. PhD  
 Research Biologist  
 Ichthyological Associates  
 Box 35, R.D. 2  
 Middletown, Delaware 19709  
 (302) 378-8622  
 A-1, B-1, B-8  
 --Distribution and abundance of Callinectes sapidus
- \* 14 Arnold, Stephen Lloyd BA  
 Graduate Student  
 Department of Geography and Environmental Engineering  
 The Johns Hopkins University  
 Charles and 34th Streets  
 Baltimore, Maryland 21218  
 (301) 366-3300  
 B-1, D-8, Palynology  
 --Relation of the plant geography of the drainage basin  
 of the Chesapeake Bay to the distribution of pollen  
 in its waters and surface sediments
- ✓ \* 15 Bailey, David Sandburg BS  
 Chief, Biology Section  
 Virginia State Water Control Board  
 4010 West Broad Street  
 Richmond, Virginia 23230  
 (703) 770-5518  
 B-5, B-8, B-17, C-7, C-9  
 --General monitoring of the tributaries of the Bay  
 in Virginia  
 --Fish kill and oil spill investigations in the Chesapeake Bay  
 --Coordination of estuarine activities with the Coast Guard,  
 Army Corps of Engineers, and Virginia Institute of  
 Marine Science

16 Baptist, John P. MS  
Fishery Biologist  
Department of Commerce  
NOAA  
National Marine Fisheries Service  
Beaufort, North Carolina 28516  
(919) 728-4595  
B-8, E-1, Radioecology  
--Evaluation of possible radiological effects of nuclear  
power plant emissions on aquatic resources

\* 17 Barnard, Robert Joseph MS  
Supervisory Microbiologist  
Bureau of Laboratories  
D.C. Department of Human Resources  
300 Indiana Avenue, N.W.  
Room 6012  
Washington, D.C. 20001  
(202) 629-2108  
B-10, B-11, B-13  
--Microbiology; including a survey of areas of the  
Chesapeake Bay for Vibrio parahaemolyticus

\* 18 Barnard, Thomas Alexander MA  
Assistant Marine Scientist  
Department of Ecology - Pollution  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-5124 ext. 35  
B-12, C-7, E-3  
--Pesticide monitoring and biological effects (including  
PCB's)  
--Bio-assay methods and techniques using a variety of  
estuarine pollutants such as heavy metals, oil  
and pesticides  
--Physiological effects on invertebrates of pollutants  
at sublethal levels

19 Barrett, B.E. PhD  
Supervisor  
Marine Fisheries  
State of New Hampshire Fish and Game  
P.O. Box 101  
Rye, New Hampshire 03870  
B-1, B-9, B-12  
--Research and management of estuarine species such as  
Mya and Crassostrea in the Hampton and Great Bay  
estuaries  
--Studies of lobsters and other exploitable marine resources

- 20 Bartley, Clara H. PhD  
 Research Associate in Microbiology  
 Microbiology  
 University of New Hampshire  
 Spaulding Life Science  
 Durham, New Hampshire  
 B-8, B-13, E-3  
 --Microbiological pollution of New Hampshire waters;  
 including the effect of increasing numbers of  
 waste disposal plants on microbiological pollution  
 --Shellfish and their distribution in estuarine waters  
 --Distribution of Vibrio parahaemolyticus
- \* 21 Bason, William Holger MS  
 Project Leader Eddystone Survey  
 Ichthyological Associates  
 Box 349  
 2 S. Meadow Street  
 Middletown, Delaware 19709  
 (302) 378-8652  
 B-5, B-8, B-9  
 --Fisheries biology; including seasonal changes in  
 populations, age, growth, food habits and  
 sampling techniques, especially for Morone saxatilis
- 22 Bauereis, Elizabeth Ingram PhD  
 Assistant Professor  
 Biological Sciences College Parallel  
 University of Delaware  
 Delaware Tech Community College  
 Georgetown, Delaware 19948  
 (302) 856-7111  
 B-12, B-16, C-2  
 --Physiology of estuarine animals; including responses  
 of marine mollusks to temperature, desiccation  
 and factors influencing respiration
- 23 Bayley, Suzanne Elizabeth PhD  
 Instructor  
 Department of Environmental Engineering  
 University of Florida  
 Gainesville, Florida 32601  
 (904) 392-0836  
 B-8, G-5, H-2  
 --Analysis of the productivity of Florida wetlands  
 with emphasis on the interaction of the marsh  
 and the activities of man



- \* 24 Beal, Kenneth Lee MA  
 Marine Biologist  
 Environmental Resources Branch  
 Corps of Engineers, Baltimore District  
 Baltimore, Maryland 21203  
 (301) 962-4713  
 B-8, B-9, E-2  
 --Fisheries biology  
 --Navigation  
 --Ecological interrelationships in Chesapeake Bay tributaries
- \* 25 Bean, George A. PhD  
 Associate Professor  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20740  
 (301) 454-3816  
 B-6, B-13, E-3  
 --Diseases of rooted aquatic plants in the Rhode River
- 26 Bechtel, Timothy Joseph MA  
 Research Fellow  
 Zoology Department  
 North Carolina State University  
 Raleigh, North Carolina 27607  
 (919) 755-2741  
 B-8, E-3, G-5  
 --Modeling persistent pesticide residues in estuarine ecosystems  
 --Effects of low level pesticide stress on estuarine productivity  
 --Chronic effects of general pollutants on fish and commercial invertebrates in estuaries
- 27 Belick, Francis Peter MS  
 Biology Instructor  
 Biology Department  
 East Carolina University  
 P.O. Box 2577  
 Greenville, North Carolina 27834  
 (919) 758-6718  
 B-5, B-12, B-15  
 --Internal anatomy and ecology of parastic copepods

\* 28 Bender, Filmore E. PhD  
 Associate Professor  
 Agricultural and Resource Economics Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3801  
 A-1, E-3, G-1, G-5, G-6, H-1, H-2, H-3  
 --Model of streams flowing into the Chesapeake Bay

\* 29 Bender, Michael Earl PhD  
 Assistant Director  
 Applied Marine Science  
 Virginia Institute Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 E-3, General ecology  
 --Eutrophication  
 --Water quality criteria  
 --Pollution biology

30 Berkson, Harold PhD  
 Specialist  
 Environmental Policy  
 Congressional Research Service  
 Library of Congress  
 Washington, D.C. 20540  
 (202) 426-5881  
 B-1, B-8, B-16, E-3, G-2  
 --Estuarine ecology as influenced by pollution and other  
 forms of habitat modification  
 --Considerations of legislation, institutional policies  
 and programs, and the interacting factors of socio-  
 economics with ecology

31 Bettie, James F. BSEE  
 Head  
 Chesapeake Bay Ecological Program Office  
 National Aeronautics and Space Administration  
 Wallops Station  
 Wallops Island, Virginia 23337  
 (703) 824-3411 ext. 366  
 A-2, G-1, Remote sensing applications  
 --Identification, demonstration, and evaluation of  
 practical applications of remote sensing from aircraft  
 and spacecraft

- 32    Bhattacharyya, Rameswar            PhD  
       Associate Professor  
       Naval Systems Engineering  
       U.S. Naval Academy  
       Annapolis, Maryland 21402  
       (301) 267-3871  
       F-3, G-6  
       --Wave resistance of marine vehicles
- \* 33    Bickley, William E.            PhD  
       Professor  
       Department of Entomology  
       University of Maryland  
       College Park, Maryland 20742  
       (301) 454-4239  
       B-8, B-12, Entomology  
       --Entomology; including developing an inventory of  
       insect species in regions of the Chesapeake  
       Bay; studying the relationship of variations in  
       insect populations to differences in environmental,  
       physical and chemical factors; and determining the  
       role of insects in providing food for other animals
- 34    Biggs, Robert Bruce            PhD  
       Associate Professor  
       Department of Geology  
       University of Delaware  
       Newark, Delaware 19711  
       (302) 738-2813  
       C-2, C-8, E-3  
       --Trace metal geochemistry of waters and sediments
- 35    Binmore, Tom V.            BA, BS  
       Appraiser  
       National Fisherman Magazine  
       Camdon. Maine  
       (617) 426-2712  
       A-2, B-1, B-2, B-8, B-17, B-18, B-19, C-1, C-2, C-6, D-1,  
       D-8, E-3, G-2, H-2  
       --Inshore fisheries biology
- \* 36    Birkuner, Francis Bruno            PhD  
       Associate Professor  
       Civil Engineering Department  
       University of Maryland  
       College Park, Maryland 20742  
       (301) 454-2440  
       C-3, C-9, E-3  
       --Determinations of concentrations of mercury, gold, and  
       cadmium in Chesapeake Bay oysters.

- 37 Bishop, John Watson PhD  
Associate Professor  
Department of Biology  
University of Richmond  
Richmond, Virginia 23173  
(703) 285-6275  
B-17, B-19, G-5  
--Plankton trophic ecology  
--Systems analyses of primary production  
--Intraspecific competition of benthic suspension feeders
- 38 Black, Dianne Elizabeth BA  
Biological Laboratory Technician  
Environmental Protection Agency  
National Marine Water Quality Laboratory  
P.O. Box 222  
West Kingston, Rhode Island 02892  
(401) 789-9751 ext. 53  
B-2, B-9, E-3  
--Fisheries biology; including culturing and rearing  
from egg to adult; hormone induced spawning;  
effects of elevated temperatures on all life stages,  
especially of winter flounder, scup, tautog,  
and mummichog; and effects of oxygen-depleted  
water on eggs and larvae
- 39 Black, Robert Earl Lee PhD  
Professor of Biology and Marine Science  
Department of Biology and School of Marine Science  
College of William and Mary  
Williamsburg, Virginia 23185  
(703) 229-3000 ext. 284  
B-12, C-2, G-6  
--Chemical embryology of invertebrates, especially  
scyphozoan coelenterates
- \* 40 Blanquet, Richard Steven PhD  
Assistant Professor  
Department of Biology  
Georgetown University  
37th and O Streets, N.W.  
Washington, D.C. 20007  
(202) 625-4126  
B-1, B-7, B-12, C-2  
--Adaptive responses of invertebrate organisms, especially  
Chrysora quiquecirrha, to changes in their  
environment, particularly with respect to temperature  
--Studies of the nature and mode of action of sea  
nettle nematocyst toxin and the chemical basis of  
the feeding response in this species

\* 41 Boesch, Donald F. PhD  
Fulbright Research Fellow  
Department of Zoology  
University of Queensland  
St. Lucia  
Brisbane, Australia 4067

B-4, B-8, E-3

--Macrobenthos; including analysis of community structure, computer classification of "communities", and effects of seasonality and multiple-source pollution on the benthos

\* 42 Boon, David D. BS  
Faculty Research Assistant  
Seafood Processing Laboratory  
University of Maryland  
Box 351  
Crisfield, Maryland 21817  
(301) 968-1655

A-3, C-1

--Shellfish biology; including red discoloration of oysters and soft-shelled clams, development of byproducts from shellfish waste, and the concentrations of iron, copper, zinc, and magnesium in crabmeat

✓ \* 43 Boone, Joseph G. BS  
Biologist III  
Fisheries Management  
Department of Natural Resources  
Maryland Fish and Wildlife Administration  
State Office Building  
Annapolis, Maryland 21401  
(301) 267-5361

B-8, B-9

--Fisheries biology; including ecology, annual assessment of population level and age structure, prediction of future abundance of food fishes, monitoring of estuarine fisheries, and movements and migrations of striped bass

44 Borrer, Arthur Charles PhD  
Associate Professor of Zoology  
Department of Zoology  
University of New Hampshire  
Spaulding Building  
Durham, New Hampshire 03824  
(604) 862-2107

B-8, B-14, Protozoology

--Systematics, ecology, and morphology of marine ciliated Protozoa, especially benthic forms

- 45 Bosch, Herman F. PhD  
Investigator  
Marine Biological Laboratory  
Woods Hole, Massachusetts 02543  
(617) 548-3705 ext. 533  
B-8, B-12, B-17  
--Behavior and ecology of estuarine cladocerans
- \* 46 Bousfield, Edward Lloyd PhD  
Chief Zoologist  
Zoology Division  
National Museum of Natural Sciences  
Ottawa, Ontario  
(413) 992-9764  
B-4, B-8, B-12, Amphipod systematics  
--Systematics, distribution, ecology and life history studies of estuarine and intertidal invertebrates, especially amphipod crustaceans of North America  
--Distribution and dispersal of medium zooplankton of the middle and St. Lawrence Estuary in Eastern Canada  
--Distribution of estuarine barnacles (Cirripedia) and larval stages in Eastern Canada
- 47 Bowman, Thomas Elliot PhD  
Curator  
Division of Crustacea  
Smithsonian Institution  
Washington, D.C. 20560  
(202) 381-5781  
B-4, B-12, B-17  
--Systematics of estuarine planktonic copepods
- 48 Boynton, Walter Raymond MS  
Graduate Student  
Program in Marine Science  
University of North Carolina  
Chapel Hill, North Carolina 27514  
(919) 942-6126  
B-1, B-8, B-19, C-5, H-3  
--Phytoplankton productivity  
--Nutrient cycling  
--Carbon budgets and salt marsh production
- \* 49 Bradley, Brian Patrick PhD  
Assistant Professor  
Department of Biological Sciences  
University of Maryland  
5401 Wilkens Avenue  
Baltimore, Maryland 21228  
(301) 455-2244  
B-18, G-5  
--Calanoid copepods, with an emphasis on genetic variation and various selective bay pressures on Eurytemora affinis

\*50 Brady, Derek Kingsley                      PhD  
Associate Research Scientist  
Department of Geography and Environmental Engineering  
The Johns Hopkins University  
Charles and 34th Streets  
Baltimore, Maryland 21218  
(301) 366-3300 ext. 709

E-3, F-3, G-5

- Statistical, hydrological and hydromechanical aspects of environmental engineering problems
- Simulation of the interactions between waste discharges (particularly thermal) and their receiving waters by computer modeling techniques

\*51 Brehmer, Morris Leroy                      PhD  
Director Environmental Operations  
Environmental Control  
Virginia Electric and Power Company  
P.O. Box 26666  
Richmond, Virginia 23261  
(703) 771-3206

B-8, C-1, E-1

- Production of sufficient electrical energy to meet the needs of society in a manner which will result in a minimum impact on the environment

\*52 Briddell, Charles David                      BS  
Engineering Consultant  
335 Hill-n-Dale Drive  
York, Pennsylvania 17403

A-2, F-7, H-1, H-2, H-3

- Manufacturing tools for the oyster producing industry; including development of an automatic oyster shucking machine and of equipment for the oyster hatchery program
- Consultant for re-cycling of solid wastes

53 Bridges, David W.                              PhD  
Research Associate  
TRIGOM  
96 Falmouth Street  
Portland, Maine 04103  
(207) 773-2981 ext. 306

B-5, B-8, B-16

- Ecology; including the development and adaptation of biomedical techniques to study organisms and the determination of the relative influence of environmental parameters such as temperature and salinity in addition to the biological phenomena of age and size on the tolerance of organisms to stressful situations
- Physiological ecology of fishes; including the evaluation of the effects of stress on fish blood properties

54 Bridges, W. Leigh MS  
 Assistant Director  
 Division of Marine Fisheries  
 Massachusetts Department of Natural Resources  
 100 Cambridge Street  
 Boston, Massachusetts 02202  
 (617) 727-3193  
 B-8, B-9, B-18  
 --Estuarine ecology  
 --Fisheries biology; including population dynamics and  
 anadromous fish research and development  
 --Coastal alterations  
 --Aquaculture  
 --Effects of power generation on marine resources

55 Brooks, Albert Law PhD  
 Oceanographer  
 Division of Oceanography  
 Navy Underwater Systems Center  
 Ft. Trumbull  
 New London, Connecticut 06320  
 (203) 442-0771 ext. 2679  
 B-17, B-18, E-2  
 --Pollution-studies - related problems in the Long  
 Island, Fishers Island, Block Island Sound area  
 --Biology of zooplankton populations

\* 56 Brooks, Arthus S. MS  
 Research Assistant  
 Department of Geography and Environmental Engineering  
 The Johns Hopkins University  
 Homewood Campus  
 Charles and 34th Streets  
 Baltimore, Maryland 21218  
 (301) 366-3300 ext. 286  
 B-8, B-17, B-19, E-1, E-3  
 --Phytoplankton and primary production and how they  
 are affected by thermal discharges

(57) Brown, James Thelbert MS  
 Chief, Estuarine Studies Section  
 North Carolina Department of Natural and Economic  
 Research  
 Division of Commercial and Sports Fisheries  
 Arendell Street  
 P.O. Box 769  
 Morehead City, North Carolina 28557  
 (919) 726-7021  
 B-8, B-9, H-3  
 --Development of comprehensive and enforceable plans  
 for management of the North Carolina coastal Zone  
 --Administration involving state permit system for  
 applications to perform excavation and/or fill in  
 estuarine waters and marshlands



- \*58 Brown, Russell Guy                      PhD  
 Professor  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3812  
 B-6, G-6, Plant ecology  
 --Taxonomy and ecology of vascular plants  
 --Pollution effects on the Chesapeake Bay
- \* 59 Brunori, Carlo Roland                      BS  
 Watershed Manager  
 Water Quality Investigation and Enforcement Division  
 Department of Water Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5553  
 B-8, C-9, E-1  
 --Water quality investigations and enforcement work  
 related to water pollution of Chesapeake Bay
- \* 60 Brush, Grace S.                              PhD  
 Research Scientist  
 Department of Geography and Environmental Engineering  
 The Johns Hopkins University  
 Charles and 34th Streets  
 Baltimore, Maryland 21218  
 (301) 366-3300 ext. 286  
 B-6, B-17, D-8  
 --Studying distributions of pollen in the water and  
 sediment of the Chesapeake Bay and relating these  
 distributions to the structure of vegetation  
 surrounding the Bay and to circulation patterns  
 within the Bay
- 61 Brush, Lucien M. Jr.                      PHD  
 Professor  
 Department of Geography and Environmental Engineering  
 The Johns Hopkins University  
 Charles and 34th Streets  
 Baltimore, Maryland 21218  
 (301) 366-3300 ext. 1035  
 D-8, E-3, F-3  
 --Physical hydrodynamics of estuaries as they relate to  
 nutrient loading  
 --Pollution in general, including sedimentation  
 --Hydrology  
 --Hydraulics  
 --Geomorphology

- 62 Bubeck, Robert Clayton      PhD  
 Research Associate  
 Department of Geological Sciences  
 University of Rochester  
 River Campus  
 Rochester, New York 14627  
 (716) 275-2410  
 D-2, E-2, E-3  
 --Geochemistry of estuaries; including geochemical  
 processes in the water-sediment interface of  
 coastal bays which exhibit permanent or extensive  
 anoxic zones  
 --Pollution monitoring of Chesapeake Bay
- 63 Buck, John D.      PhD  
 Associate Professor of Biology  
 University of Connecticut  
 Marine Research Laboratory  
 Noank, Connecticut 06340  
 (203) 536-4233  
 B-13, E-3, G-6  
 --Effects of thermal effluents on estuarine biota  
 --Effects of treated sewage effluent on the microbiology  
 and chemistry of estuarine waters  
 --Nutrition and ecology of marine agar-digesting  
 bacteria  
 --Production of antimicrobial compounds by marine bacteria
- 64 Burbidge, Richard Greig      PhD  
 Professor  
 School of Fisheries  
 Catholic University of Valparaíso  
 Valparaíso  
 Chile  
 B-8  
 --Fisheries biology, especially of Alosa aestivalis;  
 including distribution, growth, selective feeding,  
 and energy transformations of the young-of-the-year  
 in the James River, Virginia
- \*65 Burchard, Robert Paul      PhD  
 Associate Professor  
 Department of Biological Sciences  
 University of Maryland, Baltimore County  
 Catonsville, Maryland 21228  
 (301) 455-2250  
 B-8, B-13, B-18, E-3  
 --Role of bacterial flora in estuaries, especially in  
 regard to mineralization and the cycling of matter

\*66 Burnett, Joseph Warren MD  
Associate Professor  
Department of Dermatology  
University of Maryland  
University Hospital  
Baltimore, Maryland 21201  
(301) 528-6098

B-1, B-10, B-12

--Chemical, anatomical, and toxicological aspects of  
the sea nettle and related coelenterates

(67) Burrell, Victor Gregory PhD  
Associate Marine Scientist  
South Carolina Marine Resource Division  
South Carolina Wildlife Department  
217 Fort Johnson Road  
Charleston, South Carolina 29412  
(803) 795-2081 ext. 6

B-8, B-12, B-17

--Estuarine food chains, especially predator-prey  
relationships

--Copepod taxonomy

\* 68 Burton, Dennis Thorpe PhD  
Research Assistant Curator of Limnology  
Department of Limnology  
Benedict Estuarine Laboratory  
Academy of Natural Sciences of Philadelphia  
Benedict, Maryland 20612  
(301) 274-3194

B-16, C-2, E-3

--Effects of thermal loading and other stresses caused  
by power plant operations on subtle physiological  
responses of selected estuarine animals, especially  
on various stages of the life cycles of silversides,  
white perch, hogchokers, oysters, crabs, and grass  
shrimp

69 Bush, Louise F. PhD  
Professor of Zoology  
Zoology Department  
Drew University  
Madison, New Jersey 07940  
(201) 377-3000 ext. 369

B-1, B-12

--Systematics of Class Turbellaria (Phylum Platyhelminthes),  
especially Kalptorhynchia

- \*70 Butler, Philip A. PhD  
 Biologist  
 Research Consultant  
 Gulf Breeze Laboratories  
 Environmental Protection Agency  
 Sabine Island  
 Gulf Breeze, Florida 32561  
 (904) 932-5326  
 B-8, C-7, E-1  
 --National monitoring program to determine levels of  
 pesticide residues in estuarine fish, molluscs,  
 and sediments
- \*71 Buzas, Martin A. PhD  
 Curator  
 Paleobiology  
 Smithsonian Institution  
 10th and Constitution Avenue N.W.  
 Washington, D.C. 20560  
 (202) 381-5431  
 B-8, B-18  
 --Quantitative ecology of Foraminifera  
 --Justification of relationship of environmental  
 variables with species densities in space and time
- 72 Byrd, Mitchell Agee PhD  
 Professor of Biology  
 Department of Biology  
 College of William and Mary  
 Williamsburg, Virginia 23185  
 (703) 229-3000 ext. 212  
 B-8, B-14, B-20  
 --Population dynamics of the osprey with particular  
 emphasis on the role of environmental contaminants  
 on productivity
- \* 73 Byrne, Robert John PhD  
 Senior Marine Scientist  
 Department Head  
 Department of Geological Oceanography  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 38  
 --Coastal processes; including nearshore waves and  
 currents, shoreline response, and dynamics of  
 tidal inlets

- 74 Cable, Wayne Devere MS  
 Fishery Biologist  
 Department of Commerce  
 National Marine Fisheries Service  
 Cottage Street  
 Milford, Connecticut 06460  
 (203) 878-2450 ext. 26  
 B-2, B-8, B-9  
 --Ecology of bivalves, especially of larval forms
- 75 Cairnes, John Jr. PhD  
 Director  
 Center Environmental Studies  
 Virginia Polytechnic Institute and State University  
 Blacksburg, Virginia 24060  
 (703) 552-6780  
 B-18, E-3, G-1  
 --Effects of stress on aquatic communities  
 --Rapid biological information systems
- 76 Calabrese, Anthony PhD  
 Fishery Biologist (Research)  
 NOAA  
 National Marine Fisheries Service  
 Biological Laboratory  
 Milford, Connecticut 06460  
 (203) 878-2459  
 B-1, B-2, B-8, B-9, B-12, E-3  
 --Culturing of invertebrate organisms and studies of  
 physiological stress when all stages of the life  
 cycle of these organisms are exposed to environmental  
 contaminants
- \* 77 Calder, Dale Ralph PhD  
 Associate Marine Scientist  
 Department of Environmental Physiology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 33  
 B-1, B-8, B-12  
 --Taxonomy, ecology, and life history studies of marine  
 invertebrates, especially Cnidarians  
 --Control of Chrysaora quinquecirrha in the Chesapeake  
 Bay

- \* 78 Cargo, David Garrett MS  
 Research Associate  
 Natural Resources Institute  
 University of Maryland  
 Chesapeake Biological Laboratory  
 Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281 ext. 33  
 B-8, B-12, C-4  
 --Invertebrate fisheries and ecology, particularly of  
 Coelenterata and Crustacea
- 79 Carlson, Frank Thomas MS  
 Staff Assistant  
 Office of Regional Planning  
 U.S. Department of the Interior  
 18th and C Streets, N.W.  
 Washington, D.C. 20240  
 (202) 343-8059  
 B-8, H-3, Coastal zone planning  
 --Estuarine ecology of anadromous fishes
- 80 Carpenter, Edward John PhD  
 Assistant Scientist  
 Biology  
 Woods Hole Oceanographic Institution  
 Water Street  
 Woods Hole, Massachusetts 02543  
 (617) 548-1400 ext. 314  
 B-17, E-2, E-3  
 --Phytoplankton ecology  
 --Pollution biology
- 81 Carr, H. Arnold --  
 Research Analyst  
 Division of Marine Fisheries  
 Commonwealth of Massachusetts  
 Box 707  
 Sandwich, Massachusetts 02563  
 (617) 888-1155  
 B-2, B-8, H-2  
 --Research and management of shellfish and finfish  
 resources in a coastal environment seriously  
 affected by a No. 2 fuel oil spill of a large  
 magnitude

- 82 Carriker, Melbourne Romaine      PhD  
 Director  
 Systematics - Ecology Program  
 Marine Biological Laboratory  
 Woods Hole, Massachusetts 02543  
 (617) 548-3705  
 B-1, B-8, B-12  
 --Biology of muricid gastropods, especially boring  
 mechanism of Urosalpinx cinerea
- \* 83 Carter, Thomas E.      BA  
 Biologist  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 29  
 B-1, C-9, E-3
- \* 84 Carter, Worrall Reed III      MS  
 Biologist III  
 Eastern Regional Office  
 Maryland Department of Natural Resources  
 Fish and Wildlife Administration  
 Wye Mills, Maryland 21679  
 (301) 827-8122  
 B-9, E-1, H-2
- \* 85 Carver, Thomas C. Jr.      BS  
 Pesticide Specialist  
 Technical Advisory Division  
 Department of Commerce  
 NOAA  
 National Marine Fisheries Service  
 Interior Building Room 2559  
 Washington, D.C. 20036  
 (202) 343-2646  
 --Administrative control concerned with the effects of  
 pesticides on estuarine forms

- \* 86 Casey, James F. BS  
 Biologist III  
 Fish and Wildlife Administration  
 Maryland Department of Natural Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5151  
 B-6, B-8, B-9  
 --Aquatic and marsh plant studies; including monitoring density and distribution, checking their condition and evaluating their effect on the shoreline and native organisms  
 --Fisheries biology; including determining distribution, evaluating wetlands and marshes as broodstock and nursery grounds, studying the effect of dredge-and-fill on these local species, evaluating recreational and commercial fishing pressure and monitoring environmental conditions  
 --Hard shell clams and Bay scallops studies; including monitoring density and distribution, interrelationships with other organisms, market fluctuations, catch conditions and environmental conditions
- \* 87 Cassell, Harold Marvin BS  
 Department of Chesapeake Bay Affairs  
 State of Maryland  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5774  
 B-8, H-2, Wetlands  
 --Implementation of the Maryland Wetlands Law
- 88 Cassin, Joseph Mathews PhD  
 Associate  
 Institute Marine Science  
 Adelphi University  
 South Avenue  
 Garden City, New York 11530  
 (516) 294-8700  
 B-13, B-17, B-18  
 --Phytoplankton taxonomy and population dynamics  
 --Distribution of E. coli and Streptococcus Group D in sediments  
 --Sanitary implications of small boat pollution  
 --Microbial ecology of Great South Bay and adjacent waters  
 --Correlation of in situ fluorescence and bioluminescence with biotin in the New York Bight  
 --Effect of dredging on phytoplankton population dynamics



89

Castagna, Michael MA  
Senior Marine Scientist  
Eastern Shore Laboratory  
Virginia Institute of Marine Science  
Wachapreague, Virginia 23480  
(703) 787-3280  
A-1, B-1, B-2, B-8  
--Molluscan culture

90 Ceurvels, A. Russell BS  
Chief of Laboratory  
Division of Marine Fisheries  
Commonwealth of Massachusetts  
92 Fort Avenue  
Salem, Massachusetts  
(617) 745-3107  
B-1, B-2, E-1

91 Chace, Fenner Albert Jr. PhD  
Senior Zoologist  
Department of Invertebrate Zoology  
NMNH  
Smithsonian Institution  
Washington, D.C. 20560  
(202) 381-5921  
B-1, B-4, B-12  
--Taxonomy, morphology and distribution of decapod  
Crustacea

92 Chanley, Paul MA  
Biologist  
Hatchery  
Shelter Island Oyster Company  
Box 353  
Greenport, New York 11944  
(516) 477-1170  
A-1, B-2, B-12  
--Culture techniques, identification, behavior and  
biology of bivalve molluscan larvae  
--Mariculture of Mercenaria mercenaria, Crassostrea  
virginica, Homarus americanus and Nereis virens

- \* 93 Chapman, George Bunker                      PhD  
 Professor and Chairman  
 Department of Biology  
 Georgetown University  
 37th and O Streets N.W.  
 Washington, D.C. 20007  
 (202) 625-4126  
 B-1, B-5, B-8, B-12, B-13, B-15, B-20  
 --Fine structural studies; including changes in bacteria  
 and other estuarine inhabitants in relation to  
 changes in their environment and descriptions of  
 the disease process involving bacterial and  
 protozoan pathogens of estuarine inhabitants
- \* 94 Chapoton, Robert Bruce                      MS  
 Fishery Biologist  
 National Marine Fisheries Service  
 Atlantic Estuarine Fisheries Center  
 Beaufort, North Carolina 28516  
 (919) 728-4595 ext. 55  
 A-1, B-9  
 --Fisheries biology; including population dynamics,  
 movements, growth and catch of menhaden especially  
 as related to resource managements for the good  
 of commercial and sport fisheries
- 95 Cheek, Randall Puryear                      MS  
 Fishery Biologist  
 Department of Commerce  
 National Marine Fisheries Service  
 Beaufort, North Carolina 28516  
 (919) 728-4595  
 B-8, B-9, B-18  
 --Fisheries biology; including population dynamics  
 of anadromous species and Atlantic menhaden  
 and effects of estuarine alterations on marine  
 fishery resources
- 96 Chesmore, Arthur P.                      ABA  
 Research Analyst  
 Division of Marine Fisheries  
 Department of Natural Resources  
 Commonwealth of Massachusetts  
 Cat Cove Marine Laboratory  
 92 Fort Ave.  
 Salem, Massachusetts 01970  
 (617) 745-7667  
 B-8, E-1, F-6  
 --Assessment of the effects of thermal addition to the  
 waters of Salem Harbor, Massachusetts, from the  
 discharge of heated effluent from a steam  
 generating station

- 97 Chestnut, Alphonse F. PhD  
 Director and Professor  
 Institute of Marine Sciences  
 University of North Carolina  
 P.O. Box 809  
 Morehead City, North Carolina 28557  
 (919) 726-6841  
 A-1, B-1, B-2, B-8, B-12, E-2, E-3  
 --Molluscan biology; including ecology; feeding  
 mechanisms, especially of Lamellibranchs and  
 oyster studies
- \* 98 Chew, Robert Lynn BS  
 Fishery Biologist II  
 State of Florida  
 Game and Fresh Water Fish Commission  
 5301 Glasgow Avenue  
 Orlando, Florida 32805  
 (305) 859-1098  
 B-1, B-8, B-9  
 --Fisheries biology; including nursery area residency  
 studies of sciaenids and life history studies of  
 sciaenids and large mouth bass
- \* 99 Chittenden, Mark Eustace Jr. PhD  
 Associate Marine Scientist  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 68  
 B-9, B-16, B-18  
 --Fisheries biology; including life histories,  
 ecological, population dynamical and behavioral  
 studies of anadromous and estuarine fishes,  
 especially Alosine and Serranid species  
 --Physiological ecology of fishes; including studies of  
 oxygen requirements, low temperature tolerance,  
 salinity tolerance, and effects of handling stress  
 --Population dynamics of blue crabs
- \* 100 Christensen, Darryl Jack MS  
 Fisheries Biologist (Research)  
 Department of Commerce  
 National Marine Fisheries Service  
 Oxford, Maryland 21654  
 (301) 226-5193  
 B-8, B-9, E-1  
 --Finfish resource assessment  
 --Estuarine ecology

- \* 101 Clark, James Freeman BA  
 Instructor of Oceanography LTSC, USNR  
 Department of Environmental Sciences  
 U.S. Naval Academy  
 Annapolis, Maryland 21402  
 (301) 267-3564  
 B-1, B-4, B-8, B-12, E-1, E-2, E-3, G-6, G-7, G-8  
 --Distributions of benthic invertebrates, particularly  
 in response to the introduction of pollutants  
 --Investigations including diving and underwater  
 photography
- \* 102 Clark, Leo J. BS  
 Chief Engineering Section  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 7  
 E-1, G-1, G-5
- \* 103 Clark, William Dixon PhD  
 Chief Scientist  
 Westinghouse Ocean Research Laboratory  
 Westinghouse Electric Corporation  
 P.O. Box 1771  
 Annapolis, Maryland 21404  
 (301) 765-5300  
 B-2, E-2, E-3  
 --Shallow-water community studies  
 --Aquaculture  
 --Biological oceanography
- 104 Clench, William James PhD  
 Curator of Mollusks. Retired  
 Museum of Comparative Zoology  
 Harvard University  
 Oxford Street  
 Cambridge, Massachusetts 02124  
 (617) 825-2368  
 B-8, B-12  
 --Systematics of Western Atlantic Mollusca

- \*105 Cockey, Ralph Ringgold MS  
 Faculty Research Assistant  
 Natural Resources Institute  
 University of Maryland  
 Box 351  
 Crisfield, Maryland 21817  
 (301) 968-1655  
 A-3, B-1, B-13  
 --Microbiology; including studies of the incidence of  
Vibrio parahaemolyticus in Bay water and seafood  
 and of the growth and toxin production of  
Clostridium botulinum, type E, in pasteurized  
 meat of blue crabs
- \* 106 Coffin, Laurence MLA  
 Landscape Architecture and Urban Design  
 1312 18th Street N.W.  
 Washington, D.C. 20036  
 (202) 223-2088  
 H-3, Urban systems  
 --Systems analysis of urbanization in the Rhode River  
 Watershed
- 107 Cole, Charles Fraklyn PhD Cand.  
 Professor of Fisheries Biology  
 Forestry and Wildlife Management  
 Holdsworth Hall  
 University of Massachusetts  
 Amherst, Massachusetts 01002  
 (413) 545-2821  
 B-8, B-9, H-2  
 --Studies of the effects of pesticides and thermal  
 effects on eggs and larvae in estuaries  
 --Fisheries biology; including population dynamics  
 of Alosa pseudoharengus (alewife) and life  
 history studies of fishes in boreal-temperate  
 estuaries
- 108 Collette, Bruce B. PhD  
 Assistant Laboratory Director  
 Systematics Laboratory  
 National Marine Fisheries Service  
 U.S. National Museum  
 Washington, D.C. 20560  
 B-4, B-5, Systematic ichthyology  
 --Fisheries biology; including systematics, distribution,  
 and evolution of Pereidae, Hemicamphidae,  
Belonidae, and Scombridae

109 Collier, Ries Stuart MS  
Fishery Biologist  
Marine Contaminants  
National Marine Fisheries Service  
Rogers Avenue  
Milford, Connecticut 06460  
(203) 878-2459

B-1, B-8, B-9

--Heavy metal analyses and histo-pathological  
examinations of crabs, molluscs, and finfish

\*110 Colwell, Rita R. PhD  
Associate Professor  
Department of Biology  
37th and O Streets N.W.  
Georgetown University  
Washington, D.C. 20016  
(202) 625-4126

B-1, B-13, Marine animal and plant diseases

--Microbiology; including development of a data bank,  
analysis of microbial metabolism of mercury  
compounds, effects of hydrostatic pressure and  
temperature on bacteria, relationship of marine  
bacteria to plankton, survival and reproduction  
of human pathogens in the estuary, and numerical  
taxonomy

\* 111 Cones, Harold Nelson Jr. MA  
Assistant Professor  
Department of Biology, Marine Science Section  
Christopher Newport College  
Shoe Lane  
P.O. Box 6070  
Newport News, Virginia 23606  
(703) 596-7611 ext. 235

B-8, G-6, Wetlands ecology

--Estuarine pollution ecology  
--Wetlands research

\* 112 Cook, Thomas M. PhD  
Associate Professor  
Department of Microbiology  
University of Maryland  
College Park, Maryland 20742  
(301) 454-2848

B-8, B-13, E-3

--Studies of biodegradation of alkylbenzene sulfonate  
detergents and related arylsulfonates in Chesapeake  
Bay; including determination of rates of  
mineralization of linear alkylbenzene sulfonate  
(LAS) detergents and related chemical substances

in Chesapeake Bay environments, characterization of the influence of environmental and biological parameters on the biodegradation process; and development of rapid, simple bacteriological methods for detection, enumeration and isolation of arylsulfonate-oxidizing bacteria

--Studies of the bacterial flora of the Chesapeake Bay nettle, Chrysaora quinquecirrha

--Microbiological modifications of biocides and hazardous chemicals in the Bay

\* 113 Cooper, John Edwin BA  
Faculty Research Assistant  
Fisheries  
Natural Resources Institute  
University of Maryland  
Chesapeake Biological Laboratory  
Box 38  
Solomons, Maryland 20688  
(301) 326-4281 ext. 37

B-9, B-18, B-19

--Determination of effects of widening of the Chesapeake and Delaware Canal on the spawning of fishes, especially the striped bass

114 Corbett, Kenneth M. PhD  
Professor  
Botany Department  
University of Maryland  
College Park, Maryland 20740  
(301) 454-3816

B-6, Plant pathology and virology

--Virus diseases of plants

\* 115 Correll, David L. PhD  
Chemist  
Radiation Biology Laboratory  
Smithsonian Institution  
12441 Parklawn Drive  
Rockville, Maryland 20852  
(301) 443-2318

B-13, C-2, C-5

--Phosphorous cycling

--Energy flow in microbial populations

--Nutrient studies

\* 116

Cory, Robert Lawrence BA  
Research Oceanographer  
Department of the Interior  
U.S. Geological Survey  
Water Resources Division  
CBCES, Smithsonian Institution  
Route 4 Box 622  
Edgewater, Maryland 21037  
(301) 798-4424

B-8, B-19, E-1  
--Water quality monitoring  
--Primary productivity  
--Collections of epifauna, benthic fauna, and fish  
fauna to establish baseline population information  
prior to a sewage plant discharge

117 Costlow, John Deforest PhD  
Professor and Director  
Marine Laboratory  
Duke University  
Beaufort, North Carolina 28516

B-1, B-12, B-17  
--Ecology, physiology, and larval development of  
invertebrates

118 Coston, Linda Claire BS  
Fishery Biologist  
National Marine Fisheries Service  
Pivers Island  
Beaufort, North Carolina 28516  
(919) 728-4595 ext. 52

B-8, B-9, B-16  
--Effects of thermal pollution on post-larval fish

\* 119 Couch, John Alexander PhD  
Aquatic Pathologist  
Environmental Protection Agency  
Sabine Island  
Gulf Breeze, Florida  
(904) 932-5326

B-5, B-12, B-13, B-15, C-7, E-3, G-7  
--Diseases and parasites of estuarine invertebrates,  
especially of Callinectes sapidus in Chesapeake  
Bay and Chincoteague Bay  
--Effects of pesticides on the tissues of organisms



- \* 120 Craven, Henry Truxton MS  
 Senior Supervisor for Viral Isolation  
 Department of Pathology  
 Georgetown University  
 3900 Reservoir Road  
 Washington, D.C. 20007  
 (202) 625-7052  
 B-8, B-13, E-3, G-2, G-7  
 --Determination of hepatitis associated antigen  
 replication in oysters by autoradiography  
 --Recovery of viruses from undigested sewage sludge
- 121 Crawford, Claude C. PhD  
 Research Associate  
 Department of Zoology  
 University of Georgia  
 235 Sycamore Drive Apt. C-4  
 Athens, Georgia  
 (912) 546-6886  
 B-1, B-8, B-13, B-17, B-19, C-2, C-6, E-2, G-5, H-1  
 --Microbial cycling of dissolved organic compounds
- 122 Cressey, Roger Frank PhD  
 Curator  
 Division of Crustacea  
 NMNH  
 Smithsonian Institution  
 Washington, D.C. 20560  
 (202) 381-5781  
 B-5, B-8, B-15  
 --Taxonomy of parasitic copepods
- \* 123 Creter, Robert Vincent MS  
 Watershed Manager  
 Water Quality Enforcement and Investigation  
 Maryland Department of Water Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5732  
 B-1, E-1, H-2  
 --Enforcement of effluent and stream water quality  
 standards for various industrial discharges  
 --Surveillance of streams and rivers for various  
 water quality parameters

- 124 Crippen, Robert W. MA  
 Research Associate and Graduate Student  
 Department of Zoology  
 University of Maine  
 Ira Darling Center  
 Walpole, Maine 04572  
 (207) 563-3146  
 B-12, Polychaete systematics, Entrainment studies  
 --Laboratory duplication of the temperature regimes  
 found in nuclear - and fossil-fueled power  
 plants and in their discharge canals in order  
 to subject various planktonic organisms, including  
 phytoplankton, meroplankton and holoplankton,  
 to these conditions and determine their mortality;  
 field studies to determine the mortality of the  
 above organisms due to entrainment
- 125 Croker, Robert Arthur PhD  
 Associate Professor  
 Department of Zoology  
 University of New Hampshire  
 Durham, New Hampshire 03824  
 (603) 862-2113  
 B-1, B-12, Carcinology  
 --Systematics and ecology of epifaunal and infaunal  
 amphipod crustaceans
- \*126 Cronin, L. Eugene PhD  
 Director  
 Natural Resources Institute  
 University of Maryland  
 College Park, Maryland 20742  
 B-8, E-3, H-3
- \* 127 Cronin, William Baker BS  
 Research Staff Assistant  
 Chesapeake Bay Institute  
 The Johns Hopkins University  
 RD 3, Box 32  
 Annapolis, Maryland 21403  
 (301) 268-5231  
 B-1, B-8, C-4  
 --Phytoplankton identification  
 --Productivity  
 --Suspended sediments

- 128 Cross, Ford A. PhD  
 Leader Elemental Cycling Program  
 National Marine Fisheries Service  
 Atlantic Estuarine Fisheries Center  
 Pivers Island  
 Beaufort, North Carolina 28516  
 (919) 728-4595 ext. 44  
 B-8, C-1, Radioecology  
 --Distribution and turnover of trace metals (particularly  
 manganese, iron, copper, and zinc) in estuarine  
 food webs in North Carolina estuaries
- 129 Culliney, John L. PhD  
 Research Fellow  
 Museum of Comparative Zoology  
 Harvard University  
 Cambridge, Massachusetts 02138  
 (617) 495-2468  
 B-1, B-17, E-2  
 --Ecology and behavior of meroplankton and benthos,  
 especially of mollusca
- \* 130 Cumberland, John H. PhD  
 Professor of Economics  
 Bureau of Business and Economic Research  
 University of Maryland  
 College Park, Maryland 20740  
 (301) 454-2303  
 E-1, E-3, Economics  
 --Regional economics; environmental models for analysis  
 and forecasting in the Bay region
- 131 Curley, John Richard BS  
 Marine Fisheries Biologist  
 Department of Natural Resources  
 Division of Marine Fisheries  
 Commonwealth of Massachusetts  
 P.O. Box 707  
 Sandwich, Massachusetts 02503  
 (617) 888-1155  
 B-8, E-1, H-2
- 132 Curtis, Lawrence Andrew MS  
 Graduate Student (PhD Candidate)  
 Biological Sciences  
 University of Delaware  
 Lewes, Delaware 19958  
 (302) 645-9873  
 B-1, B-12, B-18  
 --Factors involved in the maintainance of the population  
 of Sabellaria vulgaris Verrill (Polychaeta:

Annelida) in Delaware Bay  
--Intrapopulation dispersion of the snail Urosalpinx  
cinerea

- \* 133 Dahlberg, Michael D. PhD  
Senior Research Biologist and Chairman  
Aquatic Biology  
Virginia Institute for Scientific Research  
6300 River Road  
Richmond, Virginia 23229  
(703) 282-9581  
B-5, B-8, E-3  
--Ecological effects of thermal loading on a freshwater  
section of the James River  
--Pesticide survey
- 134 Dame, Richard F. PhD  
Assistant Professor  
Department of Marine Science  
U.S.C. Coastal Carolina  
Conway, South Carolina 29526  
(803) 448-8419  
B-2, B-8, B-9, B-18, B-19, E-2, G-5, Ecological  
energetics, Physiological ecology  
--Development of an energy flow model for the intertidal  
oyster community  
--Formation of quantitative models describing influences  
of the estuarine environment on growth and res-  
piration in invertebrates
- 135 Damkaer, David M. PhD Cand.  
Research Biologist  
National Marine Fisheries Service  
Department of Commerce  
c/o Smithsonian Institution  
NMNH  
Washington, D.C. 20560  
(202) 381-5781  
B-17, F-2, H-3  
--Systematics and ecology of planktonic Copepoda  
--Vertical distribution of plankton in estuaries
- 136 Davis, John Dunning PhD  
Vice President  
Normandeau Associates, Inc.  
26 Norfolk Ave  
Northampton, Massachusetts 01060  
(413) 584-8983  
B-8, E-1, E-3  
--Biological impact of thermal discharges  
--Biological, physical and chemical aspects of dredge

\* 137    Davies, Robert M.                      PhD  
             Research Assistant  
             Department of Geography and Environmental Engineering  
             The Johns Hopkins University  
             34th and Charles Streets  
             Baltimore, Maryland 21218  
             (301) 366-3300 ext. 678

B-1, B-17, E-1  
--Effect of entrainment of zooplankton in power plant cooling water

139 Davis, Wayne Ray MS  
Research Aquatic Biologist  
National Marine Water Quality Laboratory  
Environmental Protection Agency  
P.O. Box 277  
West Kingston, Rhode Island 02892  
(401) 789-9751 ext. 51

B-8, B-12, E-3

--Multifactor analysis of environmental requirements for marine organisms belonging to the soft bottom (infauna) and epibenthic communities; including dissolved oxygen, temperature, and salinity requirements singly and in combination for such genera as Nephtys, Yoldia, Nucula, Crangon, Palaeomonetes, Loligo, etc. criteria used are survival, gametogenesis, spawning, cleaving rates, gastrulation, metamorphosis and behavior, depending on the material

- 140 Davis, William Jackson PhD  
Assistant Director  
Division of Fisheries  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 88  
B-9, E-1, H-3  
--Fisheries biology; including management and resource assessment
- \* 141 Dawe, Clyde Johnson MD and PhD  
Head, Section of Comparative Oncology  
Laboratory of Pathology, General Laboratories  
and Clinics  
Department of Health, Education, and Welfare  
National Cancer Institute, National Institute of Health  
Bethesda, Maryland 20014  
(301) 496-4970  
B-10, B-18, E-3, Neoplasms in aquatic animals  
--Tumors of Chesapeake Bay animals, especially the relationship of neoplasms in aquatic animals to environmental factors such as chemical, biological or physical pollutants
- 142 DeWitt, Hugh Hamilton PhD  
Assistant Professor  
Department of Oceanography  
University of Maine  
Darling Center for Research  
Walpole, Maine 04573  
(207) 563-3146  
B-1, B-4, B-5  
--Systematics, distribution and ecology of marine fishes
- \* 143 Dias, Robert Kent BS  
Extension Agent  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 90  
A-1, B-5, B-9  
--Fisheries biology; including seasonality, distribution and abundance of commercial and sport fishes of Chesapeake Bay and demersal fish resources of the continental shelf area of Middle and South Atlantic regions of U.S.

- \*144 Diaz, Robert James MS  
 Research Assistant  
 Ecology-Pollution  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 35  
 B-8, G-1  
 --Benthic study of the James River and its tributaries  
 in order to characterize existing pollution  
 conditions to serve as a base for future pollution  
 evaluation
- 145 Dietrich, William E. Jr. PhD  
 Assistant Professor  
 Biology Department  
 Indiana University of Pennsylvania  
 Indiana, Pennsylvania 15701  
 (412) 357-2254  
 B-16, B-17, B-19  
 --Primary productivity and chlorophyll studies  
 --Algal physiology
- 146 Dillon, Charles Ronald PhD  
 Assistant Professor  
 Botany Department  
 Clemson University  
 Clemson, South Carolina 29631  
 (803) 656-3452  
 B-6, B-8, B-19  
 --Primary productivity of estuarine phytoplankton,  
 periphyton, benthic macrophytes  
 --Mass culture of phytoplankton as food for maricultured  
 organisms  
 --Taxonomy and distribution of marine algae
- 147 Dimsdale, Nancy Glude BS  
 Staff Biologist  
 Chesapeake Bay Foundation Inc.  
 P.O. Box 1709  
 17 State Circle  
 Annapolis, Maryland 21404  
 (301) 268-8816  
 B-1, B-8, E-1

- 148 Doggett, Arthur Latham III      MS  
 Graduate Student  
 Department of Zoology  
 University of New Hampshire  
 Durham, New Hampshire  
 A-1, B-9, G-6  
 --Study of the American lobster and its behavior in  
 relation to water temperature and salinity
- \*149 Donnelly, Daniel K.      BS  
 Chemical Engineer  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 27  
 E-1, G-1
- \*150 Donovan, Gerard A. Jr.      --  
 Engineering Technician  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038  
 C-9, E-2, G-5
- 151 Dovel, William Lawrence      BA  
 Research Associate  
 Boyce Thompson Institute  
 1086 North Broadway  
 Yonkers, New York 10701  
 (914) 965-0390  
 B-5, B-8, B-9, B-17, B-18, Ecology of estuarine-dependent  
 ichthyoplankton  
 --Comprehension of estuarine dependent ichthyoplankton  
 --Familiarization with broad patterns of conceptual  
 views of Chesapeake ichthyoplankton as related to  
 physical and chemical parameters  
 --Hudson estuary study
- \* 152 Dressel, David Michael      --  
 Oceanographer  
 Oceanographic Division  
 NOAA  
 National Ocean Survey  
 6001 Executive Blvd  
 Rockville, Maryland 20852  
 (301) 496-8288  
 B-8, B-17, E-1, E-2, E-3  
 --Thermal pollution and its effects on estuarine



- copepods, especially Acartia tonsa
- Identification of potential marine pollutants and examination of the state-of-the-art of in situ sensors capable of monitoring them
- Formulation of functional specifications for a marine water quality monitoring data acquisition system to obtain baselines needed for environmental monitoring and predictions

\*153 Drobeck, Klaus G. BS  
 Research Assistant  
 Fisheries Department  
 Natural Resources Institute  
 Chesapeake Biological Laboratory  
 University of Maryland  
 Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281

- B-2, B-8, B-12
- Soft-shelled clam and oyster studies
- Benthic communities of Chincoteague Bay
- Aquaculture; including pilot plant operations, research with larval and young stages of the oyster, and oyster genetics

154 Dryfoos, Robert Louis PhD  
 Supervisory Fishery Biologist  
 MARMAP Field Office  
 National Marine Fisheries Service  
 RR 7 A Box 522-A  
 Narragansett, Rhode Island 02882  
 (401) 789-9326

- B-9, B-17, B-18
- Fisheries biology; including menhaden population dynamics, migrations, egg and larval surveys and resource assessments

\*155 Duggan, William Paul MS  
 Assistant Marine Scientist  
 Wachapreague Eastern Laboratory  
 Virginia Institute of Marine Science  
 Wachapreague, Virginia  
 (703) 787-3280

- B-1, B-2, B-8, B-12
- Developing commercially feasible mariculture techniques for rearing the bay scallop

- 156 Duke, Thomas Wade PhD  
Laboratory Director  
Environmental Protection Agency  
EPA Gulf Breeze Laboratory  
Sabine Island  
Gulf Breeze, Florida 32561  
(904) 932-5326  
B-1, C-7, E-3  
--Movement, accumulation and effects of pollutants,  
particularly radionuclides and pesticides, in  
the marine environment
- 157 Durand, James B. PhD  
Professor  
Department of Biology  
Rutgers University  
Camden, New Jersey  
(609) 964-1766 ext. 225  
B-8, C-9, E-1  
--Estuarine primary productivity  
--Nutrient cycling  
--Ecology of estuaries and salt marshes
- \*158 Durvasula, Subbarao Venkata PhD  
Assistant Professor and Research Associate  
Department of Biology  
The Johns Hopkins University  
3600 Charles Street  
Baltimore, Maryland 21218  
(301) 366-3300 ext. 408  
B-17, C-1, E-3  
--Comparison of oscillations in the baseline structure  
in Rhode River, a relatively unpolluted region  
of the Chesapeake Bay, with other regions  
--Development of diagnostic tools of parameters based  
on the physiological response and recovery of the  
phytoplankters with a view to predict the  
probable course of events in the Bay.
- \*159 Dyer, Hunter F. BA  
Faculty Research Assistant  
Department of Special Studies  
Chesapeake Biological Laboratory  
Box 38  
Solomons, Maryland 20688  
(301) 326-4281 ext. 69  
C-4, F-5, F-6, G-1, G-5, Physical properties,  
conductivity, salinity, and temperature  
--Gathering prototype data of current speed and  
direction and of tides for use in the Chesapeake  
Bay hydrological model

160 Eble, Albert F. PhD

Professor  
Department of Biology  
Trenton State College  
Hillwood Lakes  
Trenton, New Jersey 08625  
(609) 771-2371

B-8, B-12, B-15, B-16

--Cytology and cytochemistry of amebocytes of Mollusca  
--Physiology of digestive glands of Mollusca  
--Histopathology of disease organisms in Mollusca

\* 161 Edmunds, James Richard BA

Research Assistant  
Department of Geography and Environmental Engineering  
The Johns Hopkins University  
Charles and 34th Streets  
Baltimore, Maryland 21218  
(301) 366-3300 ext. 677

B-8, B-9, E-1

--Fisheries biology; including distribution and survival  
rates of anadromous fish species whose spawnings  
are affected by thermal discharge from steam  
electric power stations

162 Edwards, Dallas Craig PhD

Associate Professor  
Department of Zoology  
University of Massachusetts  
Morrill Science Center  
Amherst, Massachusetts 01002  
(413) 545-0148

B-8, B-12, B-18

--Population ecology and behavior of intertidal and  
shallow-water invertebrates, especially Mollusca;  
including distribution patterns, their behavioral  
basis, and ecological significance; mating  
behavior, fecundity, and early life histories;  
food preferences; effects of predation on prey  
populations; growth rates, longevity,  
and age structure in natural populations; and the  
energetics of predators. Specific studies on the  
feeding and growth rates of Polinices duplicatus  
preying on Mya arenaria under natural conditions

163 Eldridge, Peter John PhD Cand.

Graduate Student  
Fisheries Department  
South Carolina Wildlife Resources  
217 Ft. Johnson Road  
Charleston, South Carolina 29412

B-18, G-1, H-2

--Population dynamics of marine invertebrate species  
of commercial importance

\*164 Elliott, Thomas B. MS

Fellow  
Department of Microbiology  
George Washington University  
School of Medicine  
1339 H. Street. N.W.  
Washington, D.C. 20005  
(202) 331-6533

B-8, B-13, G-3

--Isolation and identification of bacteria from water  
and sediment of the upper half of the Chesapeake  
Bay in order to determine the species present  
and their distribution especially for Vibrio,  
Aeromonas, and Pseudomonas sp.

165 Ellison, Robert Lee PhD

Associate Professor  
Environmental Sciences Department  
University of Virginia  
University Station  
Charlottesville, Virginia 22903  
(703) 924-3761

B-8, D-8

--Ecology of estuarine Foraminifera  
--Geology and ecology of salt marshes

166 Engel, David Walter PhD

Fishery Biologist  
Department of Commerce  
National Marine Fishery Service  
Atlantic Estuarine Fisheries Center  
Beaufort, North Carolina 28516  
(919) 728-4595

B-12, B-16, E-3

--Salinity-temperature effect on the osmoregulation  
of decapod crustaceans, especially in regard to  
ion levels in the muscle and hemolymph and to  
the amino acid metabolism  
--Radiation biology; including the effects of the  
interactions of environmental factors on the survival  
of organisms

- 167 Erickson, Burdette Warren Jr. MS  
 Faculty Research Assistant  
 Zoology Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-5461  
 B-12, B-15, Protozoology  
 --Cytology, ultrastructure, and tissue culture of  
 individuals of Class Microsporea which  
 parasitize commercially important species
- \*168 Fang, Ching Seng PhD  
 Department Head  
 Department of Physical Oceanography and Hydraulics  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 44  
 D-6, E-1, E-2, E-3, F-3, F-4, G-5, H-3  
 --Estuarine and coastline hydromechanics
- \*169 Favorite, Anna Mae --  
 Statistical Assistant  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 0  
 B-1, C-1, C-9, Data reduction
- 170 Fell, Howard Barraclough DSc  
 Professor of Invertebrate Zoology  
 Museum of Comparative Zoology  
 Harvard University  
 Cambridge, Massachusetts 02138  
 (617) 646-1651  
 B-1, B-4, B-17  
 --Echinodermata biology  
 --Benthic pollution in Boston Harbor and environs  
 --Pollution monitoring in a saltmarsh environment  
 near Boston
- 171 Femino, Richard James MA  
 Instructor  
 Department of Biology  
 Pine Manor Junior College  
 400 Heath Street  
 Chestnut Hill, Massachusetts  
 (617) 731-7000 ext. 7905  
 B-1, B-6, B-8, B-17, B-19, C-8, E-3  
 --Relation of the environmental factors of the  
 open coast and the tide-pool algae to that of  
 estuarine or marshland pools



- \* 176 Flemer, David A. PhD  
 Research Associate Professor  
 University of Maryland  
 Chesapeake Biological Laboratory  
 Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281  
 B-8, B-19, C-9  
 --Aquatic ecology, with emphasis on primary productivity,  
 nutrient chemistry, biology of detritus, and  
 cycling of matter
- \* 177 Fletcher, Bettina B. BA  
 Biologist  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 0  
 B-13, C-9, E-3  
 --Bacteriological analysis  
 --Mercury analysis
- \* 178 Florence, Benjamin Mayo MS  
 Estuarine Section Leader  
 Fisheries Division  
 State of Maryland  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5361  
 Fishery Resource Management  
 --Fisheries biology; including use of the fishery  
 resources of Maryland tide waters, evaluation of  
 changing fishery methods, evaluation of fish  
 kills, inventory of waters used by anadromous  
 species, evaluation of various wetland types  
 as to their importance in fishery resources, and  
 evaluation of population structure of striped  
 bass in the Bay  
 --Pesticide monitoring
- 179 Foehzenbach, Jack MA  
 Senior Chemist  
 New York Environmental Conservation  
 New York State  
 91 Elm Street  
 Islip, New York 11751  
 (516) 585-5400  
 B-8, C-9, E-3  
 --Trace metals and pesticides in organisms  
 --Energy flow through marine ecosystems

- 180 Folger, David Winslow PhD  
 Assistant Professor  
 Department of Geology  
 Middlebury College  
 Middlebury, Vermont 05751  
 (802) 388-7957  
 D-1, D-8, E-2  
 --Sedimentation  
 --Pollutant distribution  
 --Hydrology
- 181 Fore, Paul Lewis PhD  
 Fisheries Biologist Research  
 South Florida Ecological Studies  
 Environmental Protection Agency  
 Box 684A Rt. 1  
 Naples, Florida 33940  
 (813) 774-2996  
 B-5, B-8, B-9  
 --Fisheries biology; including ecology, seasonality,  
 distribution, abundance, spawning, energetics  
 and a life history study of the snook in  
 southwest Florida
- \*182 Forester, John William PhD  
 Assistant Professor  
 Department of Biological Sciences  
 Goucher College  
 Dulaney Valley Road  
 Towson, Maryland 21204  
 (301) 825-3300 ext. 453  
 B-8, B-17, E-3  
 --Phytoplankton taxonomy and morphology  
 --Primary production  
 --Anadromous fisheries; including the survival of  
 clupeids entering the Susquehanna River to spawn  
 and the effect of hydroelectric water discharged  
 from the Conowingo Dam on spawning clupeids  
 --Survival of freshwater algae entering estuaries  
 --Eutrophication from the chemical-physical-  
 microbiological aspects
- \* 183 Foster, Neal Robert PhD  
 Assistant Curator  
 Department of Limnology  
 Philadelphia Academy of Natural Sciences  
 19th Street and the Parkway  
 Philadelphia, Pennsylvania 19103  
 (215) 564-3921 ext. 49  
 B-1, B-2, B-3, B-4, B-5, B-8, B-9, C-9, D-5, D-6,  
 E-2, E-3, G-7, G-8, Fish Behavior and cytogenetics



- Fisheries biology; including behavior, development, early life history, food habits and chromosome studies especially in the order Atheriniformes
- Aquaculture, particularly in relation to thermal pollution and eutrophication

184 Foster, Walter S. MS  
 Research Director  
 Productivity Research in Marine Ecology (PRIME)  
 Martin Point Road  
 Friendship, Maine 04547  
 (207) 832-9360

B-2, B-7, B-19

- Culturing of oysters, quahogs, mussels, Crassostrea virginica, Ostrea edulis, Mercenaria mercenaria, Mytilus edulis, Mya arenaria and algae in heated sea water

\* 185 Fowler, Sam Watson BS  
 Public Health Engineer  
 Division of General Sanitation  
 Environmental Health Administration  
 601 North Howard Street  
 Baltimore, Maryland 21201  
 (301) 383-2748

B-10, E-1, E-3

- Monitoring and evaluating the shellfish growing waters of the state of Maryland

186 Franz, David R. PhD  
 Assistant Professor  
 Ecology Section  
 University of Connecticut  
 Storrs, Connecticut 06268  
 (203) 429-1882 ext. 1415

B-1, B-8, B-12

- Benthic invertebrate studies; including community structure, population dynamics, and reproductive strategies, especially in the mollusks; ecology of oyster predators, especially Urosalpinx cinerea

- \*187 Frazier, John Melvin PhD  
 Research Associate  
 Department of Environmental Medicine  
 The Johns Hopkins University  
 615 North Wolfe Street  
 Baltimore, Maryland 21205  
 (301) 955-3295  
 B-1, B-8, E-3  
 --Environmental toxicology  
 --Evaluation of potential public health problems  
 generated by the use of marine organisms as  
 food resources  
 --Determination of the effects on estuarine productivity  
 by the activities of man in the Bay  
 --Role of trace materials in estuarine systems and  
 their natural cycles  
 --Effects of the activities of man on the cycling  
 of trace materials  
 --Pesticides and radioactive materials in the ecosystem
- \*188 Frierman, Edward Michael BA  
 Research Assistant  
 Department of Malacology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.25  
 B-1, B-2, B-12  
 --Examination of oysters from natural populations  
 and laboratory reared stock to determine  
 incidence of established diseases and diagnosis  
 of new diseases
- \*189 Frisbie, Charles M. MS  
 Assistant Chief, Fisheries Management  
 Fisheries Division  
 Maryland Fish and Wildlife Administration  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5365  
 A-1, B-8, B-9, B-18, Sport fisheries  
 --Fisheries biology; including management; especially  
 of fish population and distribution, harvest and  
 effort of commercial and sport fisheries and  
 ecology of Chesapeake Bay finfish populations

- \*190 Fritzsche, Norman E. BS  
 Biologist  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 29  
 B-8, B-12, C-9  
 --Benthic studies in pollution research
- 191 Frost, Terrence Parker MS  
 Chief Aquatic Biologist  
 New Hampshire Water Supply and Pollution Control  
 Commission  
 P.O. Box 95, 105 Loudon Road  
 Concord, New Hampshire 03301  
 (603) 271-3502  
 B-8, E-1, E-3  
 --Water quality improvement as treatment plants increase  
 in number and become more sophisticated  
 --Effects of thermal discharges  
 --Biological indices of estuarine habitat, especially  
 using land plants that delineate tidal marshlands  
 --Success of coho salmon stocking in estuarine  
 waters of Great Bay, New Hampshire
- \*192 Fuller, Samuel L.H. --  
 Invertebrate Zoologist  
 Department of Limnology  
 Academy of Natural Sciences of Philadelphia  
 19th Street and the Parkway  
 Philadelphia, Pennsylvania 19103  
 (215) 564-3921 ext 18  
 B-8, B-12, E-3  
 --Pollution biology of macroinvertebrates
- \*193 Gabor, John Paul BS  
 Biologist I  
 Fish and Wildlife Administration  
 Maryland Department of Natural Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5361  
 B-8, B-9, Stream ecology  
 --Fisheries biology, especially of anadromous fish;  
 including identification of spawning and nursery  
 areas and documentation of associated conditions

194

Gaither, William S. PhD

Dean  
College of Marine Studies  
University of Delaware  
Newark, Delaware 19711  
(302) 738-2841

A-2, F-3, F-4, G-2

--Estuarine and coastal research management and coordination

--Economic, engineering and environmental aspects of marine transportation with particular reference to VLCC's

\*195 Galloway, Raymond Alfred PhD

Professor  
Botany Department  
University of Maryland  
College Park, Maryland 20742  
(301) 454-3821

B-6, B-15, B-16, B-17

--Nutrition of estuarine algae, especially the heterotrophic aspects of photosynthetic planktonic forms; including the nature, extent, and source of biochemical utilization

196 Gankin, Roman MA

Ecological Consultant  
Central Atlantic Region  
Jack McCormick and Associates  
860 Waterloo Road  
Devon, Pennsylvania 19333  
(215) 687-1295

B-4, B-6, B-8, B-18, E-3, Biological erosion control

--Wetlands mapping

--Effects of spoil on marsh systems and succession onto spoil areas

--Interested in the possible usage of Spartina patens in erosion control

197 Ganna, Louis Allan BA

Biological Laboratory Technician  
National Fisheries Center and Aquarium  
Department of the Interior  
18th and C Streets N.W.  
Washington, D.C. 20015  
(202) 967-2825

B-8, B-9, B-15

--Population and evolutionary mechanisms of vertebrates, including their relationship to parasitic life cycles

--Reactions of animals to confinement causing changes in their feeding habits

198 Gaucher, Thomas Aquinas PhD  
Consultant  
Natural Resources Consultants  
53 High Street  
Westerly, Rhode Island 02891  
(401) 348-8275

B-2, B-8, H-3

- Developing cultivation systems in natural estuaries for scallops and oysters
- Developing specifications and systems for closed-recirculating artificial sea water for algae, fish, Crustacea and molluscs, especially larval stages and early juveniles
- Developing planning and policies framework for coastal zone management
- Coastal site evaluation for power plants and gas storage facilities and residential developments

\* 199 Gemignani, Hugo Gino MS  
Assistant Professor  
Department of Biology  
Anne Arundel Community College  
101 College Parkway  
Arnold, Maryland 21012  
(301) 647-7100 ext. 274

A-1, A-3, B-5, B-8, B-14, G-6, H-3

- Wildlife movement in the Chesapeake Bay area

\* 200 Geyer, John Charles PhD  
Professor of Environmental Engineering  
Department of Geography and Environmental Engineering  
The Johns Hopkins University  
Ames 513  
Baltimore, Maryland 21218  
(301) 366-3300 ext. 1094

E-3, F-4, G-6

- Water supply and wastewater treatment and disposal
- Resource planning, management and regulation
- Research in environmental science and engineering problems
- Consulting on environmental matters related to power generation

- \*201 Gibson, Victoria Roy MA  
 Assistant Marine Scientist  
 Department of Microbiology-Pathology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.14  
 B-8, B-17, B-18  
 --Phytoplankton research in Chesapeake Bay, with  
 emphasis on the diatoms and secondarily the  
 dinoflagellates  
 --Biological properties of the surface microlayer of  
 the water column, particularly the phytoplankton  
 found in this layer
- 202 Gilbert, William H. PhD Cand  
 Assistant Professor  
 Department of Biology  
 Colby College  
 Waterville, Maine 04901  
 (207) 873-1131 ext.246  
 B-8, B-11, B-18  
 --Distributional patterns in populations of estuarine  
 bivalves, especially Tellina agilis
- 203 Gilford, James Harold PhD  
 Professor  
 Department of Biology  
 Hood College  
 Frederick, Maryland 21701  
 (301) 663-3131 ext.261  
 B-7, E-3, G-6
- 204 Glancy, Thomas J. Jr. MS  
 Chairman, Cdr. -USN  
 Environmental Sciences Department  
 U.S. Naval Academy  
 Annapolis, Maryland 21402  
 (301) 267-3561  
 B-1, C-1, G-6
- 205 Gnewuch, William Theodore PhD  
 Assistant Professor of Biology  
 Department of Science and Mathematics  
 Briarcliff College  
 Briarcliff Manor, New York 10510  
 (914) 941-6400 ext.730  
 B-1, B-12, B-18  
 --Systematics, ecology and life history studies of  
 Cumacea (Crustacea: Malacostraca)

206 Godwin, Walter F. BS  
Marine Fisheries Biologist  
Commercial and Sports Fisheries Division  
Department of Natural and Economic Resources  
1510 Airlie Road  
Wilmington, North Carolina 28401  
(919) 256-3446

B-5, B-8, B-9  
--Estuarine monitoring and resource assessment  
--Biological and ecological studies of fisheries resources

\*207 Goodell, Horace Grant --  
Professor  
Department of Environmental Sciences  
University of Virginia  
Brooks Museum  
Charlottesville, Virginia 22903  
(703) 924-3995

C-3, D-8, E-1  
--Estuarine sediments and sedimentary processes  
--Geochemistry of estuarine sediments especially heavy metal sorption

208 Goodman, Joel M. MS  
Director  
Coastal Zone Resource Planning  
College of Marine Studies  
University of Delaware  
Newark, Delaware 19711  
(302) 738-2842

G-5, H-2, H-3  
--System engineering and system analysis methodology development as applied to coastal zone resource allocation problems with special emphasis on the interaction between technology and socio-economic evaluation criteria

209 Gore, Kennet Lee MS  
Research Staff Assistant  
Department of Geography and Environmental Engineering  
The Johns Hopkins University  
3300 N. Charles Street  
Baltimore, Maryland 21218  
(605) 366-3300

B-8, B-9, B-17  
--Zooplankton, with a specialization in copepods

- 210 Graham, Joseph J. PhD  
 Program Leader, Fishery Biologist (Research)  
 Department of Commerce  
 NOAA  
 NMFS  
 Biological Laboratory  
 West Boothbay Harbor, Maine 04575  
 (207) 633-2221  
 B-5, B-9, B-18  
 --Ecology of Atlantic herring, Clupea harengus, age group 0  
 --Currents and variations in temperature and salinity along coastal Gulf of Maine  
 --Ecology of fishes, especially larval fishes  
 --Physical and biological oceanography
- 211 Grant, David Carroll PhD  
 Assistant Professor  
 Department of Biology  
 Davidson College  
 Davidson, North Carolina 28036  
 (704) 892-8021 ext.329  
 B-1, B-12, Benthic ecology  
 --Niche diversification and community structure
- \* 212 Grant, George Clifford PhD  
 Associate Marine Scientist  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.17  
 B-12, B-17, E-2  
 --Hydrography of the Chesapeake Bay; including observations of temperature, salinity and dissolved oxygen  
 --Zooplankton studies; including taxonomy, biomass, and chemical analyses especially determinations of protein, lipid, and carbohydrate content of zooplankton samples
- 213 Grant, William S. BS  
 Graduate Student  
 Department of Botany  
 University of Maine  
 Orono, Maine 04473  
 B-1, B-6, B-12  
 --Trophic interactions between algae, sea urchins and asteroids in the sublittoral zone  
 --Competition for space among invertebrates in the rocky intertidal region



- 214 Graves, Willard L. PhD  
Associate Research Scientist  
Department of Geography and Environmental Engineering  
The Johns Hopkins University  
Charles and 34th Streets  
Baltimore, Maryland 21218  
(301) 366-3300 ext. 709  
F-6, G-1, G-5  
--Studying and modeling cooling water discharges from  
thermo-electric generating stations
- 215 Green, Albert G. Jr. PhD  
Assistant Director  
Marine Institute  
University of Georgia  
Sapelo Island, Georgia 31327  
(404) 485-2471  
B-16  
--Carbon dioxide fixation in Spartina  
--Physiology of salt marsh halophytes
- 216 Green, Robert Lamar PhD  
Professor and Department Head  
Coordinator, Water Resource Research Department  
Agricultural Engineering Department  
University of Maryland  
Shriver Laboratory  
College Park, Maryland 20742  
(301) 454-3901  
A-1, A-2, A-3, A-4, B-2, D-5, D-8, E-1, E-3, F-5, F-6,  
G-2, G-6, H-2, H-3  
--Water resources management with particular interest  
in water quality and abatement of pollution from  
agriculture  
--Aquacultural engineering with particular interest  
in closed cycle systems that will lead to improved  
production, harvesting and processing of aquatic  
environment which probably lies somewhere  
between a closed cycle and uncontrolled aquatic  
system
- 217 Greene, Kathleen Harleston MS  
Teacher  
York Academy  
Route 1, Box 76 D  
Gloucester, Virginia 23061  
(703) 693-4983  
B-1, G-6  
--Feeding of bivalve molluscs

218 Griffith, Ruth Ester PhD  
Not presently employed  
B-8, B-17, B-19  
--Identification of phytoplankton

\*219 Gross, M. Grant PhD  
Acting Director  
Marine Sciences Center  
State University of New York  
Stonybrook, New York 11790  
(516) 246-7710

D-2, E-2, E-3

--Effects of waste disposal operations on environmental conditions in estuarine waters, emphasizing chemical, geological, and physical aspects

\*220 Guide, Victor MSCE  
Civil Engineer  
Annapolis Field Office  
Environmental Protection Agency  
Annapolis Science Center  
Annapolis, Maryland 21401  
(301) 268-5038 ext. 27

E-1

\*221 Haas, Leonard W. MS  
Research Assistant  
Environmental Physiology  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 47

B-1, B-13, B-17

--Cycling of dissolved organic matter through estuarine plankton

--Ecology and physiology of microflagellates and surface film biota

\*222 Haefner, Paul A. PhD  
Associate Marine Scientist  
Department of Crustaceology  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 70

B-8, B-12, B-16

--Crustacean biology, ecology and physiology, especially on shrimps and crabs including Crangon septemspinosus and Callinectes sapidus

\* 223 Haley, Albert James                      ScD  
Professor  
Zoology Department  
University of Maryland  
College Park, Maryland 20742  
(301) 454-3201

B-15

--Biology of endoparasitic helminths of fishes;  
including studies of their transmission. of  
their effects on the host, and of the factors  
which influence host immunity and parasite  
pathogenicity

224 Hall, John Randolph                      PhD  
Research Associate  
Marine Institute  
University of Georgia  
Sapelo Island, Georgia  
(912) 485-2297

B-1, B-8, B-12

--Bioenergetics of intertidal marine animal sediment  
systems

\*225 Hamilton, Daniel Heyward Jr.      PhD  
Research Assistant Professor  
Chesapeake Biological Laboratory  
University of Maryland  
Solomons, Maryland 20688  
(301) 326-4281

B-8, B-13, B-17

--Primary production  
--Polychaete ecology  
--Diversity of benthic infauna

\*226 Hammed, Janet Brown                      HS  
Laboratory Assistant I  
NOAA  
NMFS  
Biological Laboratory  
Oxford, Maryland 21654  
(301) 226-5193

B-2, B-12, Molluscan shellfish pathology

--Parasite studies; including determinations of  
distribution and oyster and clam mortalities  
to serve as a guide in the placement of artificial  
oyster beds and seed transplants in the Chesapeake  
Bay

- \*227 Hamons, Frank Lowell Jr. AB  
 Project Leader  
 Fisheries  
 Maryland Department of Natural Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5151  
 H-1, H-2, H-3  
 --Shellfish population studies for the purpose of charting, recharting, classifying or reclassifying legal clam and oyster harvesting areas, according to population densities, bottom types and maximum use potentials  
 --Multidisciplinary studies designed to produce management information concerning (1) the mechanisms involved in the distribution of chlordinated hydrocarbons in suspended and bottom sediments (2) their toxic effects upon shellfish in Chesapeake Bay (3) the effects of erosion upon distribution in the Chester River, and the levels of toxic trace metals in this river system
- \*228 Hanks, Robert William PhD  
 National Coordinator, Marine Ecosystems Analyses  
 Department of Commerce  
 NOAA  
 NMFS  
 Oxford Laboratory  
 Oxford, Maryland 21654  
 (301) 226-5193  
 B-8, B-12, E-3  
 --Benthic communities and associations  
 --Invertebrate fisheries  
 --Effects of pollutants and contaminants on large ecosystems, including the Chesapeake Bay
- \*229 Hargis, William Jennings Jr. PhD  
 Director  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-4217  
 G-2, H-2, H-3
- \*230 Hargraves, Paul E. PhD  
 Assistant Professor  
 Oceanography and Botany Departments  
 University of Rhode Island  
 Narragansett Marine Laboratory  
 Kingston, Rhode Island 02881  
 (401) 792-6172  
 B-6, B-17, E-3  
 --Systematics, fine structure and distribution of estuarine phytoplankton, particularly diatoms

\* 231 Harshbarger, John Carl

PhD

Director

Registry of Tumors in Lower Animals

National Museum of Natural History

Smithsonian Institution

Washington, D.C. 20560

(202) 381-5936

E-3, Diseases of invertebrates and cold-blooded vertebrates

--Effects of chemical pollutants on, and the etiology and natural history of diseases (especially neoplasms) of, invertebrates and poikilothermic vertebrate animals, primarily at the sub-cellular and cellular levels

\* 232 Hart, Charles Willard Jr.

MA

Administrator of Consultant Programs

Department of Limnology

Academy of Natural Sciences of Philadelphia

19th Street and the Parkway

Philadelphia, Pennsylvania 19103

(215) 564-3921

A-1, B-1, B-8, B-12, E-3

--Monitoring of the aquatic environment for power companies

--Studies of thermal effects and biocides

--Literature survey of tributaries of the upper Chesapeake Bay watershed group

--Estuarine Ostracoda

--Long term changes in estuarine environments due to man and to natural causes, particularly with reference to sedimentation and salinity

\*233 Harvill, Alton M.

PhD

Professor of Biology

Department of Natural Sciences

Longwood College

Farmville, Virginia 23901

(703) 5667 ext.9

B-4, B-6

--Maritime botany of Chesapeake Bay

- 234 Hatfield, Edward Brooks MS  
 Student Research Assistant  
 Functional Biology  
 R.S.M.A.S. - University of Miami  
 10 Rickenbacker Causeway  
 Miami, Florida 33149  
 (305) 350-7308  
 B-8, B-12, B-18, E-1  
 --Ecology and distribution of benthic organisms;  
 including studies of the effects of environmental  
 conditions (including man-caused additions) on  
 them; of animal-sediment relationships; of  
 interpretation of the geological record; of  
 community or habitat structure, especially  
 field life cycles and feeding types; and of  
 population fluctuations seasonally or over  
 longer periods of time
- 235 Hauser, William Joseph MS  
 Research Assistant  
 Zoology Department  
 University of Maine  
 Orono, Maine 04473  
 (207) 581-7941  
 B-5, B-8, B-17  
 --Distribution of ichthyoplankton in relation to  
 temperature and salinity
- \*236 Haven, Dexter Stearns BS  
 Head, Department of Applied Biology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 A-1, B-2, B-8, B-18  
 --Molluskan biology and ecology; including nutritional  
 studies, low oxygen tension determinations,  
 growth rate studies of hard clams, determinations  
 of methods of control of Urosalpinx cinerea,  
 and monitoring of oyster and clam beds  
 --Ecology of jellyfish
- 237 Hayes, Helen Landau PhD  
 Special Assistant for Science Affairs  
 Office of Assistant Secretary for Science  
 Smithsonian Institution  
 1000 Jefferson Drive  
 Washington, D.C. 20560  
 (202) 381-6383  
 B-1, B-12, Research program planning  
 --Biology of bivalve mollusks  
 --Estuarine ecology  
 --Policy, planning, and administration of estuarine  
 research



242 Hidu, Herbert PhD  
Assistant Professor  
Department of Oceanography  
University of Maine  
Ira C. Darling Center  
Walpole, Maine 04573  
(207) 563-3146  
B-2, B-8, B-17  
--Ecology and physiology of bivalve mollusks  
--Marine aquaculture

\*243 Higgins, Elizabeth Thornthwaite MA  
Instructor  
Botany Department  
University of Maryland  
College Park, Maryland 20740  
(301) 454-3812  
B-6, B-8, G-6  
--Systematics and ecology of vascular flora

244 Higgins, Robert Price PhD  
Director, Oceanography and Limnology Program  
Office of Environmental Sciences  
Smithsonian Institution  
Washington, D.C. 20560  
(202) 381-6573  
B-1, B-12, E-2, Benthic biology (meiofauna)  
--Systematics and ecology of meiobenthic invertebrates,  
especially Kinorhyncha, Priapulida and Tardigrada

\*245 Higman, Daniel MS  
Botanist  
Chesapeake Bay Center for Environmental Studies  
Smithsonian Institution  
Box 622, Route 4  
Edgewater, Maryland 21037  
(301) 798-4424 or (202) 261-4190  
B-6, B-8, E-1  
--Ecology of vascular wetland plants, particularly  
tidal marsh species  
--Construction of vegetation maps of salt marshes  
by photointerpretation and field surveys  
--Factors which govern the distribution of these  
plants, and the effects of disturbances on them



- \*246 Hill, Richard PhD  
 Associate Marine Scientist  
 Department of Ecology-Pollution  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.35  
 C-6, C-9, E-3  
 --Organic and nutrient chemistry  
 --Water quality studies
- 247 Hillman, Robert Edward PhD  
 Chief  
 William F. Clapp Laboratories  
 Battelle Memorial Institute  
 Washington Street  
 Duxbury, Massachusetts 02332  
 (617) 934-5682  
 B-8, B-12, E-1  
 --Estuarine ecology of mollusks, particularly in Long  
 Island Sound, Massachusetts Bay and Cape Cod Bay
- 248 Hoese, Hinton Dickson PhD  
 Associate Professor  
 Biology Department  
 University of Southwestern Louisiana  
 Lafayette, Louisiana 70501  
 (318) 233-3850 ext. 260  
 B-1, B-8, B-12  
 --Ecology of fishes and invertebrates  
 --Biology of Dermocystidium  
 --Behavior of porpoises
- \*249 Hogman, Walter John PhD  
 Associate Marine Scientist  
 Department of Ichthyology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 692-2111 ext.37  
 A-1, B-9, B-18  
 --Fisheries biology; including population dynamics  
 of estuarine and marine species of Chesapeake  
 Bay, resource utilization of these species by  
 commercial and sport interests, and surveys and  
 monitoring of juvenile members of the principal  
 groups including the clupeides, bass, flatfishes,  
 drums and others  
 --Calculation of biological parameters useful in  
 detecting environmental trends and correlations

- \*250 Holden, Barbara Lee MS  
 Fisheries Biologist  
 Fish and Wildlife Administration  
 State of Maryland  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5362  
 B-13, B-15, E-3  
 --Fisheries biology; including fish kill investigations,  
 determinations of fish parasites and diseases,  
 and studies of the effects of chemicals on fish  
 tissues as well as on their behavior
- 251 Holt, Buford Reid PhD  
 Senior Research Associate  
 Biology  
 Brookhaven National Laboratory  
 Upton, New York 11973  
 (516) 924-6262 ext. 2543  
 B-6, B-8, B-19, G-6
- \*252 Hopkins, Thomas Chattle Jr. BS  
 Project Manager  
 Department of Water Resources  
 Maryland Department of Natural Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5675  
 B-8, E-1, H-2  
 --Estuarine ecology, especially water quality management;  
 including monitoring and instrumentation determinations
- 253 Horton, Donald B. PhD  
 Executive Director  
 TRIGOM  
 96 Falmouth Street  
 Portland, Maine 04103  
 (207) 773-2981 ext. 306  
 B-8, B-18, G-5  
 --Estuarine ecology  
 --Fish population behavior  
 --Behavior simulation models
- 254 Hoss, Donald Earl PhD  
 Fishery Biologist Research  
 National Marine Fisheries Service  
 Atlantic Estuarine Research Center  
 Beaufort, North Carolina 28516  
 (919) 728-4595  
 B-9, B-16, E-3  
 --Physiological ecology of fishes; including studies

of the effects of thermal shock on larvae entrained in power plant cooling systems, of the effects of various types of pollution on rates of oxygen consumption and metabolism, and of the accumulation of radionuclides by fish

\* 255 Hoyer, Lawrence Cogswell MED

Assistant Professor of Biology  
Biology Department  
Hood College

Frederick, Maryland 21701  
(301) 663-3131 ext 263

B-12, B-14, B-18

--Population dynamics and growth of Littorina irrorata  
York River and Solomons Island areas

256 Huebner, Judith Dee PhD

Presently unemployed

B-8, B-16, Bioenergetics

--Bioenergetics and physiological ecology of large  
intertidal invertebrates, especially carnivorous  
species, particularly the predatory gastropods  
(Polinices duplicatus)

\* 257 Huggett, Robert James MS

Marine Scientist  
Department of Ecology-Pollution  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 84

B-8, C-1, D-2, E-3, H-2

--Chemistry of heavy metals in natural waters including  
absorption to bottom sediments  
--Distribution of chlorinated hydrocarbon pesticides  
and PCB's in Chesapeake Bay  
--Analysis and chemistry of unnaturally introduced  
oils (i.e. Bunker "C")

258 Hull, Cecil Hale J. --

Staff Engineer  
Planning Division  
Delaware River Basin Commission  
25 State Police Drive  
P.O. Box 360  
Trenton, New Jersey 08603  
(609) 883-9500

E-3, H-2, H-3

--Effects of phytoplankton on the oxygen balance of  
polluted estuaries

- 259 Humm, Harold J. PhD  
 Director  
 Marine Science Institute  
 University of South Florida  
 St. Petersburg, Florida 33701  
 (813) 898-7411 ext. 231  
 B-2, B-6  
 --Marine algae
- 260 Hunt, George Russell PhD  
 Research Manager  
 New Business Ventures Division  
 3 M Company  
 Crow's Nest Drive  
 P.O. Box 270  
 Buzzards Bay, Massachusetts 02532  
 (617) 759-4761  
 B-2, E-1, Commercial aquaculture  
 --Spawning, maturation and growth studies of oysters and lobsters under controlled conditions in order to provide a decreased life cycle and increased production per unit area
- \*261 Hunter, Harriet Ellen BA  
 Student  
 Department of Crustaceology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 66  
 B-1, B-12, B-17  
 --Studies of adult and larval forms of Emerita talpoida; including ecology, reproductive habits, behavior, salinity tolerances, and migration habits
- 262 Huntsman, Susan Ann PhD  
 Research Associate  
 Oceanography  
 Duke University Marine Laboratory  
 Beaufort, North Carolina 28516  
 (919) 728-2111 ext. 38  
 B-13, B-16, B-17, B-19  
 --Phytoplankton physiology; including the utilization of trace metals and the interactions with natural and man-made chelating substances

- \*263 Hyer, Paul Vincent PhD  
Associate Marine Scientist  
Department of Physical Oceanography and Hydraulics  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2211 ext. 39  
E-2, F-3, G-5  
--Estuarine mathematical models of salinity and  
dissolved oxygen distributions in estuaries
- 264 Ichiye, Takash --  
Professor  
Oceanography  
Texas A and M University  
College Station, Texas 77843  
(713) 845-6661  
F-1  
--Circulation in estuaries and on the continental  
shelf (Northern Gulf of Mexico)  
--Storm surges and shelf waves (Gulf of Mexico)  
--Diffusion of pollutants (nearshore)
- 265 Isaacson, Peter Alan MA  
Aquatic Ecologist  
Office of Environmental Planning  
NYS Public Service Commission  
44 Holand Avenue  
Albany, New York  
(518) 474-5363  
E-1, H-2, H-3  
--Resource planning and management as it relates to  
public utility use of aquatic resources
- 266 Jackson, Herbert William PhD  
Chief Biologist  
National Training Center  
Environmental Protection Agency  
Cincinnati, Ohio 45268  
(513) 871-1820 ext. 259  
B-8, E-1, E-3  
--Recording of the recovery of an area of Spartina  
in the Oyster River of Durham, New Hampshire,  
which was wiped out by a sludge spill (dump),  
probably in 1966

- 267 Jahoda, John Curtis PhD  
 Assistant Professor of Biology  
 Department of Biological Sciences  
 Bridgewater, Massachusetts 02324  
 (617) 697-6161 ext. 317  
 B-18, B-20, E-1, E-3  
 --Salt marsh ecosystem studies; including the ecology  
 and dynamics of small mammals and the effects  
 of heavy metal contamination and salinity changes  
 on the ecosystem itself
- 268 Jamieson, William MS  
 Project Engineer  
 Grumman Aerospace Corporation  
 Department 666  
 Bethpage, New York 11714  
 516 LR 5  
 B-8, E-1, E-3  
 --Estuarine pollution ecology  
 --Biological indicators
- 269 Jeffries, Harry Perry PhD  
 Associate Professor  
 Graduate School of Oceanography  
 University of Rhode Island  
 Kingston, Rhode Island 02881  
 (401) 792-6282  
 B-17, C-2, E-2  
 --Determinations of proportions of living and dead  
 materials eaten by commercially important shellfish  
 (hard clam, ocean quahog, smooth mussel) and  
 fishes (winter flounder and menhaden) based on  
 a model of fatty-acid flow in an estuarine  
 ecosystem from producers to consumer  
 --Determinations of community stability, diversity,  
 and succession from patterns of fatty acids and  
 free amino acids in the organisms growing  
 on submerged plates ("fouling communities")  
 --Fisheries biology; including distribution and  
 abundance of benthic fishes in Narragansett Bay,  
 with emphasis on long-term variations as functions  
 of climatic change and environmental alteration

- \*270 Jenkins, Dale Wilson PhD  
 Director  
 Ecology Program  
 Smithsonian Institution  
 Washington, D.C. 20560  
 (202) 381-5946  
 B-1, B-4, E-1, Natural areas, remote sensing  
 --Remote sensing of the ecology of the Rhode River Estuary  
 --Survey of all ecologically important species for preservation in protected and natural areas of the Chesapeake Bay region  
 --Evaluation of the impact of activities on federal lands and the effect on ecology
- \*271 Jensen, Loren Duane PhD  
 Associate Professor  
 Department of Geography and Environmental Engineering  
 The Johns Hopkins University  
 33 North Charles Street  
 Baltimore, Maryland 21218  
 (301) 366-3300 ext. 605  
 B-8, C-9, E-3  
 --Estuarine ecology, particularly the applied aspects of domestic and industrial discharges into estuarine areas; temporal and spatial responses of aquatic populations to water quality, including determinations of natural fluctuations in such parameters as temperature, salinity, and dissolved oxygen
- 272 Johnson, Curtis Allen MS  
 Associate Professor of Agricultural Engineering  
 Food and Agricultural Engineering  
 University of Massachusetts  
 Agricultural Engineering Building  
 Amherst, Massachusetts 01002  
 (413) 545-2230  
 A-2, B-2, E-3, G-6, H-3, Oyster propagation in off-bottom controlled environments  
 --Growth of oysters in controlled conditions
- \*273 Johnson, Patricia G. BA  
 Biological Laboratory Technician  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 29  
 C-9, E-1, E-3  
 --Development and study of automated analytical methods for nutrient chemistry

- \* 274 Johnson, Robert Karl PhD  
 Research Associate  
 Fisheries  
 Chesapeake Biological Laboratory  
 Solomons, Maryland 20688  
 (301) 326-4281 ext. 37  
 B-5, B-9, B-20  
 --Fisheries biology; including the production and  
 distribution of eggs and larvae, especially with  
 regard to environmental impact effects of man-made  
 changes
- \*275 Jonas, Lilburn Leroy Jr. BA  
 Biologist  
 Water Quality Investigation and Enforcement Division  
 Maryland Department of Water Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5732  
 B-1, B-6, C-9  
 --Pollution abatement, control and ecology  
 --Environmental monitoring
- 276 Jones, Galen Everts PhD  
 Director  
 Jackson Estuarine Laboratory-Microbiology  
 University of New Hampshire  
 Durham, New Hampshire 03824  
 (603) 862-2175  
 B-13, C-2, C-3  
 --Effect of heavy metals on marine bacteria  
 --Chemolithotrophic bacteria, particularly sulfur  
 bacteria, and psychrophilic bacteria in the  
 marine environment
- 277 Jontos, Robert Jonathon MS  
 Teacher, Central High School  
 City of Bridgeport - Board of Education  
 45 Lyon Terrace  
 Bridgeport, Connecticut 06606  
 (203) 333-8551 and (203) 333-2604  
 B-1, B-8, Marsh ecology  
 --Effects of salinity upon the pituitary, thyroid  
 and caudal neurosecretory system of the  
 american eel (A. nostrata)  
 --Coastal wetlands, including seasonal changes in the biota



- \*278 Jordan, Robert A. PhD  
Associate Marine Scientist  
Department of Ecology-Pollution  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext.35  
B-17, B-19, E-3  
--Eutrophication  
--Algal ecology  
--Productivity
- \*279 Joyce, John M. PhD  
Oceanographer  
Chesapeake Bay Center for Environmental Studies  
Radiation Biology Laboratory  
Smithsonian Institution  
Route 4, Box 622  
Edgewater, Maryland 21037  
(301) 798-4424  
B-8, B-17, B-19  
--Phosphorus cycling in the estuarine ecosystem  
--Productivity studies on marshes, attached algae,  
and phytoplankton, as well as phosphorus uptake  
in these components
- \*280 Karlander, Edward P. PhD  
Associate Professor, Plant Physiology and Biophysics  
Department of Botany  
University of Maryland  
College Park, Maryland 20742  
(301) 454-3821  
B-19, E-2, F-5, F-6, Energy budgets  
--Physical energy budget, including radiation from the  
sun, of the Chesapeake Bay and its associated  
wetlands; including the biological, physical,  
and thermal changes in response to variations in  
quality and quantity of energy fluxes
- \*281 Kayser, Sigrid R. BA  
Chemist  
Annapolis Field Office  
Environmental Protection Agency  
Annapolis Science Center  
Annapolis, Maryland 21401  
(301) 268-5038 ext. 29  
C-1, C-7, C-9  
--Determination and identification of pesticides and  
petroleum products in water sediment and effluent  
systems

- \*282 Kazama, Frederick Yoshio PhD  
 Marine Scientist  
 Department of Microbiology-Pathology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 B-1, B-6, B-13  
 --Ultrastructure, nutrition and other physiological activities of estuarine Phycomycetes, especially of species of Phlyctochytrium and Thraustochytrium  
 --Distribution of fungi associated with decaying Spartina sp. along a salinity gradient, including cellulolytic and pectolytic activity of these isolates
- 283 Keck, Richard Thomas MS  
 Resident Biologist  
 College of Marine Studies  
 University of Delaware  
 P.O. Box 286  
 Lewes, Delaware 19958  
 (302) 645-8489  
 B-1, B-2, B-8, B-12, C-2
- 284 Keith, Willis J. BA  
 Marine Biologist II  
 South Carolina Wildlife Resources Department  
 Marine Resources Division  
 217 Fort Johnson Road  
 Charleston, South Carolina 29412  
 (803) 795-7271  
 A-1, B-1, H-2  
 --Management and conservation practices of the shellfish areas of South Carolina, especially of intertidal oysters  
 --Investigation of aerial photography for shellfish inventory purposes
- 285 Kendall, Arthur Wayne MS  
 Fishery Biologist  
 Ichthyoplankton  
 Sandy Hook Laboratory  
 Fort Hancock  
 Highlands, New Jersey 07732  
 (201) 872-0200 ext. 57  
 B-5, B-9, B-17  
 --Fisheries biology; including studies of offshore spawning areas and of migrations of young stages to estuaries, especially of clupeids and bluefish

\* 286 Kendall, Paul Charles BS  
 Research Assistant  
 Department of Applied Biology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23061  
 (703) 642-2111 ext. 85

H-2

--Possible methods of management of the oyster industry

287 Keney, Peggy Mobley BS  
 Fishery Biologist  
 Department of Commerce  
 National Marine Fisheries Service  
 Atlantic Estuarine Fisheries Service  
 Beaufort, North Carolina 28516  
 (919) 728-4595 ext. 23

B-1, B-8, B-12

--Identification of crab larvae

\*288 Kennedy, Victor Stuart PhD  
 Research Associate  
 Chesapeake Biological Laboratory  
 University of Maryland  
 Hallowing Point Field Station  
 Prince Frederick, Maryland 20678  
 (301) 535-2121

B-8, B-12, E-3

--Physiological ecology

--Invertebrate adaptations

--Effects of environmental alterations

\*289 Kerby, Catherine Jane PhD  
 Research Analyst, Office of Oceanography  
 and Limnology  
 Office of Environmental Sciences  
 Smithsonian Institution  
 Washington, D.C. 20560  
 (202) 381-6572

B-8, B-12, B-16

--Biology of polychaetes, especially of Sabella  
microphthalma, found in Chesapeake Bay; including  
 taxonomical, ecological, physiological, behavioral,  
 reproductive and life history studies

290 Kerhin, Randall Thomas MA  
 Geologist  
 Coastal and Estuarine Geology  
 Maryland Geological Survey  
 214 Latrobe Hall  
 The Johns Hopkins University  
 Baltimore, Maryland 21218  
 (301) 235-0771

- Determination of the sediment distribution and bottom topography of nearshore environments as related to coastal processes
- Sedimentational patterns of the beach and nearshore environments and factors relating to such sedimentation patterns

\* 291 Kerwin, James Arthur MA  
 Oceanographer  
 Bureau of Sport Fisheries and Wildlife  
 Patuxent Wildlife Research Center  
 Laurel-Bowie Road 197  
 Laurel, Maryland 20810  
 (301) 776-4880 ext. 286

- B-1, B-6, B-8, E-2  
 --Diving duck habitats in Chesapeake Bay  
 --Study of submerged aquatic plants  
 --Tidal marsh ecology

\* 292 Kiger, Robert W. PhD Cand.  
 Graduate Research Assistant  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3812

- B-4, B-6  
 --Vascular flora of Chesapeake Bay

293 King, Howard James III BS  
 Biologist III  
 Department of Natural Resources  
 Fish and Wildlife Administration  
 Wye Mills Regional Office (Eastern)  
 Wye Mills, Maryland 21679  
 (301) 827-8122

- B-8, B-9, H-2  
 --Fisheries biology, especially of anadromous fish;  
 including documenting physical or chemical  
 barriers in streams to ascending fish  
 --Chemical and physical parameters of streams

294 King, William C. --  
 Seafood Sanitarian  
 Food Control  
 Department of Health and Mental Hygiene  
 61 North Howard Street  
 Baltimore, Maryland 21201  
 (301) 383-2625

- B-10, E-1, G-2  
 --Bacteriological monitoring of waters for classification

- for shellfish harvesting and of shellfish in the processing plants of Maryland
- Pesticide - heavy metal monitoring of major harvest areas
- Shoreline survey of watersheds to find, and correct by legal action, the introduction of sewage from commercial or private structures
- Monthly sampling of sewage treatment effluents
- Resistance of Vibrio parahaemolyticus in oyster shellstock under normal refrigeration
- Modification of handling techniques directed to reduction or stasis of bacteria in seafood products

295 Kinnear, Brian S. MS  
 Research Biologist  
 National Marine Fisheries Service  
 NOAA  
 Northeast Fisheries Center  
 Narragansett Laboratory  
 P.O. 522A Narragansett  
 Narragansett, Rhode Island 02882  
 (401) 789-9326

B-5

- Ichthyoplankton collected by NMFS vessels on MARMAP or Northeast Fishery Center cruises in the North Atlantic

\*296 Kinsman, Blair PhD  
 Program Coordinator  
 Chesapeake Bay Center for Environmental Studies  
 Smithsonian Institution  
 Route 4 Box 622  
 Edgewater, Maryland 21037  
 (301) 798-4424

E-2, F-3, G-1

- Estuarine hydrodynamics and circulations
- Air-sea interface studies
- Survey design
- Data storage and handling

297 Klarman, William L. PhD  
 Associate Professor of Plant Pathology  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3816

B-6, B-8, B-13

- Diseases of rooted aquatic plants, especially the determinations of their range, their scope, and

the factors, particularly ones resulting from increased civilization, which influence these diseases

- \*298 Kocan, Richard Michael PhD  
Research Parasitologist  
Department of the Interior  
Fish and Wildlife Service  
Patuxent Wildlife Research Center  
Laurel, Maryland 20810  
(301) 776-4880  
B-13, B-14, B-15  
--Infectious and parasitic diseases of wild waterfowl  
on the Chesapeake Bay
- 299 Kohlmeyer, Jan Justus PhD  
Associate Professor  
Institute of Marine Sciences  
University of North Carolina  
Morehead City, North Carolina 28557  
(919) 726-6841  
B-6, B-13, Marine mycology  
--Marine fungi; taxonomy, morphology, ecology, geographical  
distribution, biodeterioration, and relationships  
to wood-boring animals
- \*300 Koo, Ted S.Y. PhD  
Research Professor  
Natural Resources Institute  
University of Maryland  
Chesapeake Biological Laboratory  
Box 38  
Solomons, Maryland 20688  
(301) 326-4281 ext. 21  
A-1, B-2, B-5, B-8, B-9, B-18, H-2  
--Fisheries biology; including studying population  
dynamics, determining age, tagging juveniles,  
and sonic tagging of the striped bass of  
Chesapeake Bay  
--Ecological effect of the Chesapeake and Delaware Canal
- \*301 Kotz, Mary Inez MeD  
Instructor  
Science and Mathematics  
Chesapeake College  
Wye Mills, Maryland 21679  
(301) 758-1537  
B-8, B-12, B-16, B-17, B-18, C-1, C-2, C-9, E-1, E-3,  
G-6  
--Pollution biology; including the effects of dredging

on phytoplankton and zooplankton and the effects  
of the effluents of manufacturing concerns  
on the ecology of a marsh area

- \*302 Kouch, John Alexander                      PhD  
Pathologist-Aquatic  
Environmental Protection Agency  
Sabine Island  
Gulf Breeze, Florida  
B-5, B-12, B-13, B-15, C-7, E-3, G-7  
--Diseases of estuarine invertebrates, especially of  
Callinectes sapidus  
--Effects of pesticides on the tissues of marine and  
estuarine organisms
- 303 Kraeuter, John Norman                      PhD  
Research Associate  
Marine Institute  
University of Georgia  
Sapelo Island, Georgia 31327  
(912) 485-2333  
B-1, B-12, E-2  
--Systematics and distribution of estuarine infaunal  
invertebrates  
--Role of invertebrate feces in nutrient recycling  
in marine systems  
--Animal-sediment relationships
- \*304 Kriete, William Henry Jr.                      BS  
Research Assistant  
Department of Ichthyology  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 66  
A-1, B-1, B-8, B-9  
--Fisheries biology; including studies of population  
migration patterns, especially as a result of  
changes in temperature or salinity; of age; of  
growth rates; of spawning rates; of population  
size; of year class strength as determined by  
tagging, etc; and of the effects on populations  
of commercial fishing

- 305 Kruczynski, William Leonard PhD  
 Assistant Professor of Biology  
 Biology Department  
 Hartwick College  
 Oneonta, New York 13820  
 (607) 432-4200 ext. 238  
 B-8, B-12, B-15  
 --Association of pea crabs and their host molluscs
- \* 306 Krusberg, Lorin Ronald PhD  
 Professor  
 Botany Department  
 University of Maryland  
 H.J. Patterson Hall  
 College Park, Maryland 20742  
 (301) 454 - 3816  
 B-6, C-2, Nematology  
 --Biology of nematodes parasitic on estuarine and  
 aquatic plants
- \* 307 Kuo, Albert Y. PhD  
 Associate Marine Scientist  
 Department of Physical Oceanography and Hydraulics  
 Virginia Institute of Marine Science  
 Gloucester Point, Maryland 23062  
 (703) 642-2111 ext.45  
 E-2, F-3, G-5  
 --Estuarine hydrodynamics  
 --Turbulence, particularly the diffusion in turbulent  
 flow
- 308 Kutkuhn, Joseph Henry PhD  
 Fishery Research Biologist  
 USDI Fish and Wildlife Service  
 Great Lakes Fishery Laboratory  
 Box 640  
 Ann Arbor, Michigan 48107  
 (313) 769-7100 ext. 461  
 A-1, B-18, H-2  
 --Ecology, including dynamics of estuarine fish  
 and shellfish populations, especially of menhaden  
 and penaid shrimps



- \* 309 LaBuy, James Leonard BS  
 Aquatic Biologist  
 Law Enforcement  
 Charlottesville Virginia Laboratory  
 Environmental Protection Agency  
 1140 River Road  
 Charlottesville, Virginia 22901  
 (703) 296-9897  
 B-9, B-12, B-17, E-1  
 --Water quality studies, especially in relation to  
 planktonic and benthic organisms and fishes
- 310 Lacroix, Guy PhD  
 Associate Professor and Executive Secretary  
 GIROQ  
 Department of Biologie Universit   Laval  
 Quebec (10e) Quebec, Canada  
 (418) 656-2864  
 B-8, B-17, B-19  
 --Primary production and ecology of zooplankton in the  
 St. Lawrence Estuary and the Gulf of St. Lawrence
- \* 311 Lakshmanan, Sitarama PhD  
 Associate Professor  
 Biochemistry Division  
 Chemistry Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-2620  
 B-12, C-2, E-3  
 --Studies of the oyster Crassostrea virginica;  
 including its development as a laboratory animal  
 and the impact of man-made alterations in the  
 Chesapeake Bay on its biochemistry and nutrition
- \* 312 Lanier, James Alfred MA  
 Education Program Director  
 Department of Information and Education  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 89  
 A-1, B-2, B-5, B-9  
 --Fisheries biology; including catfish management,  
 effects of thermal shock on fish eggs and larvae,  
 culture techniques, and design and management  
 of aquarium systems

--Study of trace element enhancement through trophic levels by neutron activation analysis and A.A. spectrophotometry of estuarine sediments (including interstitial water and fecal pellets), benthic fauna and pelagic fishes

--Benthic sampling to determine species abundance, distribution, and biomass

--Diseases of fishes

- Studies of oysters; including the environmental history of oyster communities through time, aquaculture, dynamics of oyster populations, and periodic growth fabrics in oysters and

their use in the studies of dynamics  
--Animal orientation patterns in estuaries

- \*317 Lear, Donald W. PhD  
Microbiologist, Chief Biology Section  
Annapolis Field Office  
Environmental Protection Agency  
Annapolis Science Center  
Annapolis, Maryland 21401  
(301) 268-5038 ext. 22  
B-8, B-13, B-17, C-9, E-1, E-2, E-3  
--Application of ecological knowledge and progress  
to water quality management
- 318 Lee, John Joseph PhD  
Professor  
Biology Department  
City College of New York  
Convent Ave. at 138th Street  
New York, New York 10031  
(212) 621-2549  
B-8, B-12, B-13, B-16, B-17, B-18, B-19, E-1, G-6,  
H-2, H-3  
--Microbial ecology  
--Special growth factors of dinoflagellates,  
Foraminifera, diatoms, and nematodes  
--Mineral cycling, energy flow, succession,  
community dynamics and population structure  
of salt marsh "aufwuchs" communities  
--Water quality indices
- 319 Leonard, John Robert MS  
Fishery Biologist Research  
Department of the Interior  
National Fisheries Center and Aquarium  
18th and E Streets N.W.  
Washington, D.C. 20240  
(202) 967-2551  
B-2, C-9, E-1  
--Study of Chesapeake Bay fish and crabs retained in  
closed-recirculated aquariums, including water-  
quality monitoring and determining the effects  
of various filter materials on the growth and  
survival of the organisms

- \*320 Lewis, Charles Edward BES  
 Faculty Research Assistant  
 Bay Model Study  
 Chesapeake Biological Laboratory  
 Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281 ext 69  
 A-2, G-1, G-5  
 --Instrumentation  
 --Prototype data gathering for Chesapeake Bay hydrographic model
- 321 Lewis, Robert M. MS  
 Fishery Biologist(Research)  
 Department of Commerce  
 NOAA  
 National Marine Fisheries Service  
 Pivers Island  
 Beaufort, North Carolina 28516  
 (919) 728-4595 ext.29  
 B-8, B-9, B-16  
 --Fisheries biology; including life history studies of Atlantic menhaden in North Carolina estuaries, determination of the relation of abundance and distribution of young menhaden and associated species to environmental factors (temperature, salinity, tide,etc.) and determination of the tolerance of menhaden to different temperature and salinity levels
- 322 Light, Melvin AB  
 Chief Coastal Oceanography Section  
 Coast Guard Oceanographic Unit  
 Department of Transportation  
 U.S. Coast Guard  
 159 E  
 Navy Yard Annex Building  
 Washington, D.C. 20390  
 (202) 426-4640  
 C-9, E-1, F-5  
 --Oil pollution monitoring program of estuarine and coastal waters

- \* 323 Linert, Charles Henry MS  
 Biologist I  
 Maryland Department of Natural Resources  
 Fish and Wildlife Administration  
 State Office Building  
 Annapolis, Maryland 21401  
 B-9, E-1, H-2  
 --Fisheries biology; including determination of  
 anadromous fish associated with wetlands; their  
 seasonal variability of occurrence; estimation  
 of their standing crop; their relationships with  
 wetland dependent competitors, predators, and  
 forage species; and their association with the  
 chemical and physical characteristics of the  
 wetland aquatic habitat  
 --Baseline study of the chemical and physical  
 characteristics of the wetland aquatic habitat
- 324 Link, Garnett William MA  
 Graduate Student  
 Department of Zoology and Institute of Marine  
 Sciences  
 University of North Carolina  
 Morehead City, North Carolina 28557  
 (919) 726-6841  
 B-5, B-20, Marine ichthyology  
 --Fisheries biology; including the comparative life  
 histories of three species of sea basses  
 (Centropristis striatus, C. philadelphicus  
 and C. ocyurus) found in the estuaries and  
 off the coast of North Carolina
- \* 325 Lippson, Robert Lloyd MS  
 Fisheries Biologist  
 Resource Assessment  
 National Marine Fisheries Service  
 Oxford, Maryland 21654  
 (301) 226-5193  
 A-1, B-8, B-12  
 --Crustacean ecology; including assessment of the  
 size of commercial stocks
- \* 326 Loesch, Joseph George PhD  
 Associate Marine Scientist  
 Applied Science Department  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.85  
 B-9, B-18, G-6  
 --Distribution, abundance and growth of the hard  
 clam, Mercenaria mercenaria, in lower Chesapeake Bay

- \* 327 Loftus, Michael Eldridge BS  
 Graduate Student  
 Biology Department  
 The Johns Hopkins University  
 34th and Charles Streets  
 Baltimore, Maryland 21218  
 (301) 366-3300 ext. 408  
 B-16, B-17, B-19  
 --Methods involved in determining rates of primary productivity and their relation to the nutritional and physiological condition of several algal species isolated from the Chesapeake Bay  
 --Correlation of laboratory conditions of certain species with conditions preceding and during seasonal periods in which the same species are dominant in the Chesapeake Bay region adjacent to the mouths of the Rhode and West Rivers  
 --Algal blooms
- \* 328 Longcore, Jerry Ray MS  
 Research Biologist  
 Department of the Interior  
 Bureau of Sport Fisheries and Wildlife  
 Patuxent Wildlife Research Center  
 Laurel, Maryland 20810  
 (301) 776-4880 ext. 283  
 B-14, C-7, E-3  
 --Monitoring pollutants in waterfowl (ducks and geese), especially in their wings and eggs  
 --Wintering ecology of waterfowl
- \* 329 Longwell, John R. MS  
 Assistant Chief  
 Water Quality Investigation and Enforcement Division  
 Maryland Department of Water Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5731  
 E-1, E-3, H-2  
 --Administration and investigations of water quality

- \*330 Lucy, John Allen BS  
 Graduate Student and Assistant  
 Department of Applied Biology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.85  
 A-1, B-1, B-2, B-8, B-9, B-12, C-1, D-8, G-2, G-6,  
 G-7, H-2  
 --Intertidal community structure and ecology  
 --Aquaculture, especially of bivalves  
 --Commercial shellfisheries  
 --Marine extension services
- \*331 Ludwick, John Calvin PhD  
 Director and Professor  
 Institute of Oceanography  
 Old Dominion University  
 Norfolk, Virginia 23508  
 (703) 489-8000 ext.455  
 D-8, E-2, F-1  
 --Tidal currents in the entrance to Chesapeake Bay  
 --Shoals and their origin
- \*332 Lunz, John David MS  
 Assistant Marine Scientist  
 Department of Pollution-Ecology  
 Virginia Institute of Marine Science  
 521 Bulkeley Place Apt. 25  
 Newport News, Virginia 23601  
 (703) 642-2111 ext.35  
 B-16, C-1, E-3  
 --Uptake and release of trace elements by estuarine  
 organisms, specifically as these processes  
 relate to the overall transport within the  
 marine system  
 --Bioconcentration and depuration of metals in oysters  
 as a function of the physical and chemical  
 properties of a metal in the environment
- \*333 Luttrell, Mark Edwyn MS  
 Assistant Marine Scientist  
 Department of Ecology-Pollution  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.50  
 C-1, Sanitary engineering, Civil engineering  
 --Industrial-municipal outfall studies  
 --Estuarine data analysis; including DO, BOD-COD,  
 coliform and benthos dredging studies, and  
 impact determinations

- \* 334 Lynch, Maurice Patrick PhD  
Associate Marine Scientist  
Directors Office  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111  
B-8, B-16, G-3  
--Environmental physiology, especially of invertebrates  
--Development of physiological indicators of condition  
for use in detecting changes in invertebrate  
populations as a result of sublethal stresses
- 335 Lynn, Dickson Kenneth PhD  
Assistant Professor and Assistant Director  
Center for Environmental Studies  
Virginia Polytechnic Institute  
1020 Derring Hall  
Blacksburg, Virginia 24061  
(703) 552-6780  
B-12, B-18, E-1  
--Effects of toxic materials on estuarine organisms,  
including fish, invertebrates and algae  
--Effects of stress on physiology, community structure  
and functions of aquatic communities
- \* 336 McCormick, Jack PhD  
President  
Jack McCormick and Associates  
860 Waterloo Road  
Devon, Pennsylvania 19333  
(215) 687-1295  
B-8, E-1, G-2, H-2, H-3, Environmental impact assessments  
--Tidal marsh and lowland forest vegetation mapping,  
vegetation analysis, analysis of animal populations,  
environmental impact assessments for NEPA statements  
and project planning  
--Environment monitoring and reassessment  
--Preparation of draft environmental guidelines,  
regulations, zoning codes, building codes and  
legislation
- 337 McCormick, Michael Edward PhD  
Associate Professor and Chairman  
Naval Systems Engineering  
U.S. Naval Academy  
Annapolis, Maryland 21402  
(301) 267-3874  
E-3, F-3, G-5, G-6, Environmental protection  
--Estuarine hydromechanics  
--Waves on floating and fixed bodies  
--Environmental protection



338 McCoy, Edward Gordon MS  
Chief, Research and Development Section  
Commercial and Sports Fisheries  
Department of Natural and Economic Resources  
P.O. Box 769  
Morehead City, North Carolina  
(919) 326-7021

B-1, B-8, B-9

--Management of North Carolina commercial and marine sports fisheries; including inventory, survey, monitoring, anadromous fish studies in the Albemarle Region and offshore, calico scallop study offshore, shrimp research, nursery area identification, oyster rehabilitation, and permit investigation for dredge and fill in estuaries

339 McCrary, Anne Bowden PhD  
Assistant Professor  
Biology Department  
University of North Carolina at Wilmington  
P.O. Box 3725  
Wilmington, North Carolina 28401  
(919) 791-4330 ext. 250

B-1, B-12, B-17

--Zooplankton studies, particularly the planktonic larvae of invertebrates

--Seasonal timing of reproductive activity in invertebrates

--Commensal associations

\*340 McDowell, Samson PhD  
Retired  
Gulf Plankton Laboratory (Retired)  
Academy of Natural Sciences of Philadelphia  
19th Street and the Parkway  
Philadelphia, Pennsylvania 19104  
(813) 463-5535

B-1, B-8, B-17

--Ecology of Protozoa

--Identification of microniches

\*341 McEachran, John Douglas MA  
Graduate Research Assistant  
Department of Ichthyology  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111

B-4, B-5, B-9

--Comparative biology of seven species of skates  
which occur along the continental shelf from  
Nova Scotia to Cape Hatteras

\*342 McErlean, Andrew Joseph PhD  
Senior Staff Biologist  
Office of Technical Analysis  
Environmental Protection Agency  
Waterside Mall S.W.  
Washington, D.C. 20460

B-5, B-18, E-3, Estuarine pollution ecology

--Biota of Chesapeake Bay; including measurement of  
change, development of indicator criteria for  
estuarine communities

343 McGill, David A. PhD  
Professor  
Ocean Science  
U.S. Coast Guard Academy  
New London, Connecticut 06320  
(203) 443-8463

B-8, B-19, C-9

--Examination of productivity and biomass of a typical  
estuarine region; including seasonal checks on  
the availability of nutrients and seasonal  
collections of plankton and benthos to provide  
material for energy evaluations leading toward  
the calculation of trophic dynamics for the system

\*344 McGinnes, Franklin Pierce BS  
Executive Vice President  
Virginia Seafoods Inc.  
Irvington, Virginia 22480  
(703) 438-2111

A-4, B-2, G-2

--Operating an oyster hatchery

345 McHugh, John Laurence PhD  
Professor of Marine Resources  
Marine Sciences Research Center  
State University of New York  
Stony Brook, New York 11790  
(516) 246-3449

A-1, B-8, B-9, G-6, H-2

--History of the fisheries of New York State and the  
Middle Atlantic Bight

--National and international fishery management

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SCIENTIFIC PERSONNEL RESOURCE INVENTORY: LIST AND INDEX TO RESE--ETC(U)  
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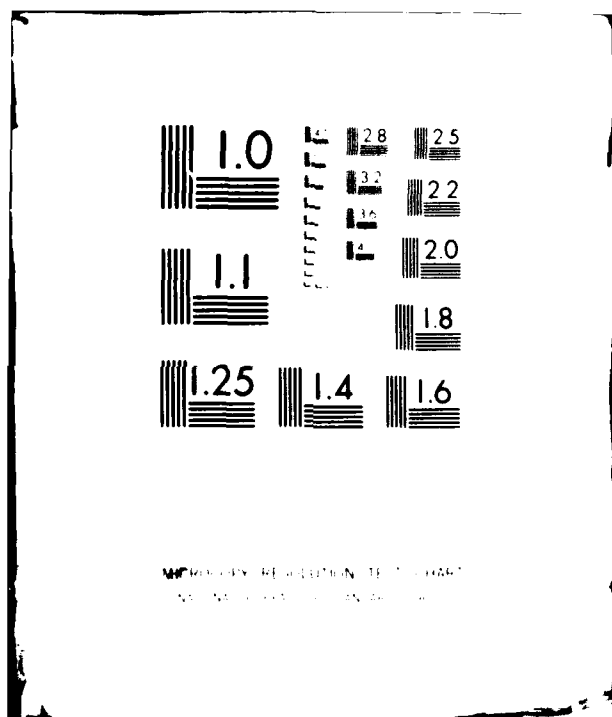
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--Economic and social-political barriers to  
management of natural resources  
--Critical problems of the coastal zone

\*346 McLean, Richard Ivan BS  
Radioecologist  
Department of Limnology  
Academy of Natural Sciences of Philadelphia  
Benedict Estuarine Laboratory  
Benedict, Maryland 20612  
(301) 274-3194

B-8, E-1, Radioecology  
--Distribution of radionuclides in the aquatic ecosystems  
with particular emphasis on the cycling within  
estuarine food chains

347 McLeod, Guy Collingwood MA  
Director of Research  
New England Aquarium  
Central Wharf  
Boston, Massachusetts 02110  
(617) 742-8830

B-8, E-1, G-1  
--Water quality monitoring  
--Trace metal analysis  
--Bioassay studies  
--Systems of modeling  
--Algal productivity

\* 348 McMahon, John Walter PhD  
Associate Research Officer  
Biology and Health Physics Division  
Atomic Energy of Canada Ltd.  
Chalk River  
Ontario, Canada  
(613) 584-3311 ext. 258

B-7, B-15, B-17, B-19  
--Biology of trematodes living of fish gills

349 McNicol, Douglas --  
President  
Bluenose Oyster Farms Ltd.  
RR # 2  
River Denys, Nova Scotia, Canada  
(914) Whycocomagh 172-32

A-1, B-2, G-2  
--Developing oyster culture methods and equipment

- \* 350 McPherson, Evelyn M. --  
Physical Science Technician  
Annapolis Field Office  
Environmental Protection Agency  
Annapolis Science Center  
Annapolis, Maryland 21401  
(301) 268-5038 ext. 29  
C-1, C-9, E-3
- \* 351 MacIntyre, William Gordon PhD  
Associate Marine Scientist  
Department of Oceanography  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111  
C-1, C-3, C-5  
--Oil (petroleum) fate and transport  
--Bay mouth nutrient flux measurements  
--Kinetics of silicate-sea water solute interactions
- 352 Malouf, Robert Edward MS  
Resident Biologist  
College of Marine Studies  
University of Delaware  
Sea Grant Demonstration Project  
Lewes, Delaware 19958  
(302) 645-8489  
B-2, B-12, B-17  
--Invertebrate biology; including energy relationships  
in bivalve molluscs and density dependent  
relationships between bivalve larvae and their  
phytoplankton food source  
--Mariculture studies
- \* 353 Mangum, Charlotte Preston PhD  
Associate Professor  
Department of Biology  
College of William and Mary  
Williamsburg, Virginia 23185  
(703) 229-3000 ext. 240  
B-1, B-12  
--Invertebrate biology; including adaptations of  
organisms to low oxygen conditions and effects  
of temperature on their metabolism and activity

- \*354 Manzi, John Joseph MS  
 PhD Candidate  
 Department of Microbiology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 14  
 B-8, B-17, B-19  
 --Phytoplankton community structure in the lower  
 York River
- \*355 Marcellus, Kenneth Lee PhD  
 Associate Marine Scientist  
 Department of Ecology - Pollution  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 50  
 B-6, B-8, Remote sensing of wetlands  
 --Wetland studies; including relationships between  
 marshes and commercially and recreationally  
 valuable organisms; determination of the  
 importance to the marine environment of specific  
 marshes, application of remote sensing (photographic)  
 in the evaluation of wetlands, especially of  
 plant species identification without need for  
 ground truth data; and an analysis of the  
 environmental impact on wetland areas (the  
 coastal zone in general) of specific development  
 projects such as dredging, and bulkheading  
 --Aquaculture  
 --Environmental law  
 --Principles and applications of coastal zone management
- \*356 Marchello, Joseph M. PhD  
 Professor and Head  
 Chemical Engineering Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-2431  
 A-3, E-3, F-4, F-6, G-6, H-1, H-2, H-3  
 --Use of waste heat and sewage in fish farming  
 --New methods for combating thermal pollution
- 357 Marcy, Barton Coles Jr. MS  
 Marine Research Biologist  
 Resident Fishes and Plankton  
 Essex Marine Laboratory, Inc.  
 Novelty Lane  
 Box 367  
 Essex, Connecticut 06426  
 (203) 767-8131  
 B-5, B-17, E-3  
 --Ecological study of the effects of a Connecticut

atomic power company; including creel census evaluation; abundance and distribution studies; plankton surveys; entrainment of fish eggs and larvae; growth of eggs and larvae in the laboratory; tagging to determine migration patterns; winter population estimates; physiological studies; location of shad spawning areas; population estimates of juvenile shad and emigration rates; age, growth, stomach analyses and fecundity of major species; sonic tracking; plant intake evaluation; and reactions of young shad to heated effluent

- \* 358 Marhsco, Richard J. PhD  
Assistant Professor  
Agricultural and Resource Economics Department  
University of Maryland  
College Park, Maryland 20742  
(301) 454-3801  
A-1, E-3, G-1, G-5, G-6, H-1, H-2, H-3  
--Fisheries economics
- \* 359 Marks, Colin Herbert PhD  
Associate Professor  
Mechanical Engineering Department  
University of Maryland  
College Park, Maryland 20742  
(301) 454-2408  
A-2, E-3, F-3  
--Sea nettle barrier development  
--Oil containment studies  
--Mixing of stably stratified fluids, including thermal pollution studies
- \* 360 Marks, James W. BS  
Supervisory Chemist, Analytical Laboratory  
Annapolis Field Office  
Environmental Protection Agency  
Annapolis Science Center  
Annapolis, Maryland 21401  
(301) 268-5038 ext.0  
C-1, C-5, C-9
- 361 Marsh, George Alex PhD  
Assistant Professor of Ecology  
Department of Biological Sciences  
Florida Atlantic University  
Boca Raton, Florida 33432  
(305) 395-0339  
B-8  
--Epifaunal invertebrates and algal epiphytes associated



with eelgrass (Zostera) in the lower York River,  
Virginia

--Invertebrate epifauna of turtle grass (Thalassia)  
in Pine Island Sound, Florida

362 Marsh, James Alexander Jr. PhD  
Assistant Professor  
Marine Laboratory  
University of Guam  
P.O. Box EK  
Agana, Guam 96910  
749-2421

B-8, B-19, E-3

--Primary productivity

--Reef ecology

--Effects of thermal pollution on tropical communities

363 Marshall, Benjamin Lawrence BS  
Director  
Marine Ecology-Chemical Analysis Division  
Marine Research Institute  
P.O. Box 1253  
Duxbury, Massachusetts 02332  
(617) 934-2196

B-2, B-8, B-18, C-1, C-9, D-2, E-1, F-1, F-6, G-4,  
G-5, H-2, H-3, Bioassay studies

--Physiological ecology, population dynamics, and  
larval culture of marine invertebrates,  
especially in relation to marine pollutants

--Analytical testing on a wide variety of chemical  
substances including pesticides and heavy metals

364 Marshall, Nelson PhD  
Professor of Oceanography  
Graduate School of Oceanography  
University of Rhode Island  
Kingston, Rhode Island 02881  
(401) 792-6185

B-1, B-8, B-19, E-2, H-3

--Trophic studies in shallow estuarine environments

\*365 Martin, John Varick PhD  
Assistant Research Scientist  
Department of Earth and Planetary Sciences  
The Johns Hopkins University  
North Charles and 33rd Streets  
Baltimore, Maryland  
B-6, B-8, B-17, G-7, G-8  
--Phytoplankton analyses for power plant siting studies

- 366 Massmann, William Henry MA  
 Fishery Research Specialist  
 Division of Federal Aid  
 Bureau of Sport Fisheries and Wildlife  
 Department of the Interior  
 Washington, D.C. 20240  
 (202) 343-5603  
 B-8, B-9, H-3  
 --Research administration
- 367 G.C. Matthiessen --  
 Marine Research, Inc.  
 East Wareham, Massachusetts 02538  
 A-1, B-1, E-1
- 368 Maturo, Frank J.S. Jr. PhD  
 Associate Professor  
 Zoology Department  
 University of Florida  
 Gainesville, Florida 32601  
 (904) 392-1566  
 B-1, B-8, B-12  
 --Systematics, zoogeography, ecology, larval behavior  
 and development of Bryozoa
- 369 Maurer, Don Leo PhD  
 Assistant Professor  
 College of Marine Studies  
 University of Delaware  
 Field Station  
 Lewes, Delaware 19958  
 (302) 645-8489  
 B-2, B-8, B-12  
 --Benthic ecology of invertebrates
- 370 Mayo, Judy Hartman MS  
 Fishery Biologist  
 Department of Commerce  
 NOAA  
 NMFS  
 Atlantic Estuarine Fisheries Center  
 Beaufort, North Carolina 28516  
 (919) 728-4595 ext. 25  
 B-9, B-17, E-1  
 --Fisheries biology; including aging of American shad  
 and menhaden and sorting and identifying fish  
 larvae from estuaries and nearshore surveys  
 --Blue crab (Callinectes sapidus) studies  
 --MARMAP sampling

371 Mazurkiewicz, Michael

PhD

Assistant Professor  
Biology and Oceanography  
University of Maine  
Darling Marine Laboratory  
Walpole, Maine 04573  
(207) 563-3146

B-8, B-12, B-15

--Ecology; with emphasis on parasitism, diseases and  
mechanisms of dispersal and population -  
recruitment of invertebrates

--Biogeography

372 Meade, Robert H.

--

Research Hydrologist  
U.S. Geological Survey  
Woods Hole, Massachusetts 02543  
(617) 548-8533

C-4, D-8, E-3

--Sources, transport and deposition of estuarine sediments

--Mixing of fresh and salt waters

\*373 Meanley, Brooke

MA

Biologist  
Department of the Interior  
Bureau of Sport Fisheries and Wildlife  
Patuxent Research Center  
Laurel, Maryland 20810  
(301) 776-4880 ext.215

--Ecology of birds, especially of red-winged blackbird  
and rail populations

374 Meldrim, John W.

PhD

Senior Research Biologist  
Experimental Laboratories  
Ichthyological Associates  
Box 35, RD 2  
Middletown, Delaware 19709  
(302) 378-9626

B-8, E-3, Fish behavior

--Fisheries biology; including behavioral responses  
to temperature, oxygen and chemical compounds  
of estuarine fishes and ecological effects of  
chemical and power industries on fish populations

--Site selection for nuclear power plants



--Development of criteria to assess the extent of human perturbation on the aquatic ecosystem at surface waters of the continental U.S.

379 Michael, Allan Donald PhD  
Research Associate  
Marine Biological Laboratory  
Woods Hole, Massachusetts 02543  
(617) 548-3705 ext. 502

B-8, B-12, E-3

--Systematics and ecology of Amphipoda

--Data analysis

--Benthic community structure

380 Mikolaities, Julius M. AB  
Marine Biologist  
U.S. Department of the Army  
Corps of Engineers  
424 Trapelo Road  
Waltham, Massachusetts 02154  
(617) 894-2400 ext. 521

B-1, B-8, H-3

--Investigating water resource projects, coastal and inland, in the New England - New York area

381 Miller, Don Curtis PhD  
Research Aquatic Biologist  
National Marine Water Quality Laboratory  
Environmental Protection Agency  
P.O. Box 398  
Johns Island, South Carolina 29455  
(803) 559-0371

B-8, B-12, E-3

--Physiological ecology of estuarine and coastal organisms

--Elucidation of the environmental requirements of certain marine fishes and invertebrates of the Southeast

\*382 Miller, James R. PhD  
Professor and Head  
Agronomy Department  
University of Maryland  
College Park, Maryland 20742  
(301) 454-3718

B-16, E-3, Soil science

--Wetlands studies

--Classification and use of soils in the Chesapeake Bay area

- \* 383 Miller, Robert Edwin BS  
 Faculty Research Assistant  
 Natural Resources Institute  
 University of Maryland  
 Chesapeake Biological Laboratory  
 Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281 ext.64  
 B-8, B-12, B-18, G-7, H-1, H-2, H-3  
 --Blue crab survey project  
 --Larval crustacean studies
- 384 Mills, Margaret Ann MS  
 Assistant Director  
 Cape Cod Bay Biotic Census  
 Marine Biological Laboratory  
 LOEB Building  
 MBL Street  
 Woods Hole, Massachusetts 02543  
 (617) 548-3705 ext. 503  
 B-12, Benthic ecology  
 --Systematics and ecology of benthic invertebrates,  
 especially of Isopoda
- \* 385 Millsaps, Harold S. Jr. BS  
 Faculty Research Assistant  
 Department of Special Studies  
 Chesapeake Biological Laboratory  
 Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281 ext.52  
 B-8, B-9, E-3  
 --Field sampling, sorting, and identification of  
 zooplankton, fish eggs and fish larvae to provide  
 a framework for the study of the effects of  
 thermal pollution in the region of a proposed  
 nuclear power plant location
- \* 386 Moncure, Richard William BS  
 Computer Systems Analyst  
 Department of Oceanography  
 Virginia Institute of Marine Science  
 P.O. Box 387  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.93  
 C-9, E-2, G-1  
 --Methods of data analysis, information storage and  
 retrieval, especially for physical and chemical  
 water quality data

- \*387 Monney, Neil Thomas PhD  
 Head of Ocean Engineering  
 Naval Systems Engineering Department  
 U.S. Naval Academy  
 Annapolis, Maryland 21402  
 (301) 267-3873  
 E-2, F-4, G-6  
 --Engineering properties of marine sediments  
 --Aquaculture, marine fouling, and ecological impact  
 of ocean structures
- \*388 Moore, Charles James MS  
 Biologist  
 Department of Limnology  
 Philadelphia Academy of Natural Sciences  
 19th Street and the Parkway  
 Philadelphia, Pennsylvania 19103  
 (301) 274-3194 ext.4  
 B-5, B-18, E-3  
 --Fisheries biology, with emphasis on the effects  
 of power plants (heated effluents) on the occurrence,  
 seasonality, feeding and food habits, and  
 movements of fish within the estuary
- 389 Moore, Johnes K. PhD  
 Associate Professor  
 Department of Biology  
 Salem State College  
 Salem, Massachusetts 01970  
 (617) 745-0556  
 B-8, B-12, B-17, G-6  
 --Larval ecology  
 --Benthic-water relationships
- \* 390 Morales-Alamo, Reinaldo BS  
 Research Assistant  
 Department of Applied Marine Biology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2112  
 B-1, B-8, B-12  
 --Ecology of marine invertebrates, especially of the  
 Scyphozoa
- \* 391 Morgan, Raymond Paul II PhD  
 Research Associate  
 Fisheries  
 Natural Resources Institute  
 Chesapeake Biological Laboratory  
 Solomons, Maryland 20688  
 (301) 326-4281

B-8, B-16, C-2

--Fisheries biology; including biochemical systematics, effects of pollutants on enzyme systems, and the environmental requirements of eggs and larvae, especially of anadromous fishes

\*392 Morrow, James W. BS

Project Manager  
Central Atlantic Region  
Jack McCormick and Associates  
860 Waterloo Road  
Devon, Pennsylvania 19333  
(215) 687-1295

B-6, B-8, B-19, Energy flow in marsh systems

--Maryland wetland mapping program

--Marsh succession, particularly succession of Phragmites australis

--Energy flow in marsh ecosystems and across marsh-upland interface

393 Morse, Douglass Hathaway PhD

Associate Professor  
Zoology Department  
University of Maryland  
College Park, Maryland 20742  
(301) 454-5410

B-5, B-8, B-18

--Fisheries biology; including interactions of Fundulus heteroclitus, F. majalis and F. diaphanus, especially in the effects of these species in modifying the niche dimensions of one another

394 Morse, M. Patricia PhD

Associate Professor  
Biology Department  
Northeastern University  
Huntington Ave.  
Boston, Massachusetts  
(301) 454-5410

B-1, B-2, B-12

--Systematics and life-histories for nudibranch mollusks

395 Morton, Eugene Siller PhD

Chesapeake Bay Center for Environmental Studies  
Smithsonian Institution  
Route 4 Box 622  
Edgewater, Maryland 21037  
(301) 798-4424

B-3, B-12, B-14

--Brackish water Odonata studies



- \*396 Motta, Jerome J. PhD  
 Assistant Professor  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3816  
 B-6, B-8, B-13  
 --Inventory of extant species of fungi in the Chesapeake Bay and its tributaries  
 --Correlative study of salinity and temperature and the occurrence of ascomycetous wood decay fungi
- \* 397 Mountford, Kent PhD  
 Research Assistant Curator  
 Department of Limnology  
 Academy of Natural Sciences of Philadelphia  
 Benedict Estuarine Laboratory  
 Benedict, Maryland 20612  
 (301) 274-3194 ext.6  
 B-8, B-17, B-19  
 --Plankton dynamics of temperate estuaries; including the taxonomy, distribution, succession and productivity of phytoplankton and zooplankton communities  
 --Experimentation with computer techniques in the multiparameter analysis of primary production data as an indicator of change in the estuary
- \* 398 Mountford, Nancy Kirk BA  
 Faculty Research Assistant  
 Naval Resources Institute  
 Chesapeake Biological Laboratory  
 University of Maryland  
 Hallowing Point Field Station  
 Route 1  
 Prince Frederick, Maryland 20678  
 B-12, E-1, E-3  
 --Anchor dredge study of the benthic invertebrates in the vicinity of a nuclear generating station; including collection, sorting, identification, species diversity and biomass studies
- \*399 Mulford, Richard A. BS  
 Biologist  
 Department of Limnology  
 Academy of Natural Sciences of Philadelphia  
 Benedict Estuarine Laboratory  
 Benedict, Maryland 20612  
 (301) 274-3194  
 B-17  
 --Taxonomy and ecology of marine and estuarine plankton

- 400 Mullen, Robert Sean BS  
 Research Assistant/Technician  
 Benedict Estuarine Laboratory  
 Philadelphia Academy of Natural Sciences  
 Benedict, Maryland 20612  
 (301) 274-3194  
 B-2, B-17, B-19  
 --Effects of heat discharges on the primary productivity  
 of phytoplankton  
 --Basic phytoplankton ecology, nutrient requirements,  
 growth patterns, species abundance and diversity,  
 etc.  
 --Methods for measuring productivity in the estuary  
 --Investigations of certain phenomena such as dark  
 bottle oxygen fixation and photorespiration of  
 phytoplankton
- \*401 Mumola, Peter Benedict PhD  
 Research Scientist  
 Environmental and Space Science Division  
 NASA  
 Langley Research Center  
 Hampton, Virginia 23365  
 (703) 827-2986  
 B-17, E-1, E-3  
 --Remote sensing of phytoplankton by dye-laser induced  
 fluorescence: phytoplankton fluorescence and  
 quantum yield
- \* 402 Munson, Thomas Oren PhD  
 Manager  
 Aquatic Biology  
 Westinghouse Ocean Research Laboratory  
 P.O. Box 1771  
 Annapolis, Maryland 21404  
 (301) 765-5773  
 B-1, C-2, C-7, C-9, E-1, E-3, H-2  
 --Routes of entry and movement of "hard" chlorinated  
 pesticides and polychlorinated biphenyls through  
 the estuarine system
- 403 Murdoch, Marianne B. --  
 Biological Technician  
 Ecosystem Energetics  
 Atlantic Estuarine Fisheries Center  
 Beaufort, North Carolina 28516  
 (919) 728-4590 ext. 50  
 B-8, B-13, B-19

- \* 404 Murphy, George J. BS  
 Coordinator  
 Natural Resources Department  
 FWA  
 P.O. Box 126  
 Pasadena, Maryland 21122  
 (301) 267-5197  
 B-2, B-8, D-1, H-2  
 --Fisheries biology  
 --Hydrography  
 --Aquaculture programs  
 --Chesapeake Bay resources management
- \* 405 Musick, John A. PhD  
 Associate Marine Scientist  
 Department of Ichthyology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.65  
 B-4, B-5, Community ecology  
 --Fisheries biology, including community ecology,  
 behavior and systematics  
 --Zoogeography  
 --Evolution
- 406 Myers, Thomas D. PhD  
 Assistant Professor  
 College of Marine Studies  
 University of Delaware  
 Newark, Delaware 19711  
 (302) 738-2725  
 B-4, B-12, B-17, E-1, E-2, E-3  
 --Composition, distribution and vertical migration  
 of zooplankton populations  
 --Movement of water in estuarine and coastal zones  
 in relation to movement of introduced pollutants  
 --Environmental impact studies resulting from ocean  
 dumping or other waste additions
- \* 407 Nauman, Jon William --  
 Oceanographer  
 Department of the Interior  
 U.S. Geological Survey  
 218 E Street  
 Anchorage, Alaska 99501  
 277-5526  
 B-1, B-8, B-12, B-19, C-9, E-1, E-3, F-6, G-7  
 --Effects of thermal and pulpmill additions on estuarine  
 epifauna and water quality

- \* 408 Nelson, John D. PhD  
 Post-Doctoral Fellow  
 Biology Department  
 Georgetown University  
 31st and O Streets, N.W.  
 Washington, D.C. 20007  
 (301) 625-4126  
 B-8, C-2, E-3  
 --Ecology of mercury-resistant bacteria in Chesapeake Bay  
 --Bacterial metabolism of mercury compounds
- 409 Neumann, David Alan BS  
 Faculty Research Assistant  
 Department of Environmental Research  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 535-2121  
 B-5, B-16, E-3  
 --Fisheries biology; including sublethal effects of  
 suspended sediments on various physiological  
 parameters in commercially important fish species
- 410 Newell, Irwin Mayer PhD  
 Professor of Zoology and Entomology  
 Biology Department  
 University of California  
 Riverside, California 92502  
 (417) 787-5910  
 B-1, B-4, Acarology  
 --Systematics and ecology of Halacaridae
- \*411 Newmann, Martin W. MS  
 Research Fishery Biologist  
 Middle Atlantic Coastal Fisheries Center  
 National Marine Fisheries Service  
 Oxford Laboratory  
 Oxford, Maryland 21654  
 (301) 226-5193  
 B-5, B-15, E-3  
 --Disease in estuarine animals  
 --Effects of pollution on fish
- \*412 Nichols, Maynard M. PhD  
 Associate Professor  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext 75  
 D-1, D-8, E-2  
 --Estuarine sedimentation and hydrology  
 --Foraminiferal ecology

413 Nichols, Paul Ruffner --  
Fishery Administrator  
Department of Commerce  
National Marine Fisheries Service  
1801 North Moore Street  
Arlington, Virginia 22209  
(703) 557-9312

B-8, B-9, B-18  
--Population dynamics of Atlantic and Gulf of Mexico  
menhaden

\* 415 Norcross, John J. MS  
Senior Marine Scientist  
Department Head  
Department of Data Processing  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext.82  
--Data processing and data analysis  
--Circulation of waters at the mouth of the Chesapeake  
Bay, flux of suspended sediments in the same  
area, and circulation of nearshore waters off  
the coastline of Virginia

- 105 -

- 417 Norris, Robert M. --  
 Executive Secretary  
 Potomac River Fisheries Commission  
 P.O. Box 128  
 Colonial Beach, Virginia 22443  
 (703) 224-2923  
 A-1, H-2, Conservation of fisheries  
 --Licensing and regulating fishing gear and fisheries  
 in the Potomac River below Washington, D.C.  
 --Maintenance and improvement of the seafood resources  
 of the Potomac River
- 418 O'Brien, Francis MS  
 Biology Department  
 Southeastern Massachusetts University  
 N. Dartmouth, Massachusetts 02747  
 (617) 997-9321 ext. 412  
 B-2, B-8, B-12  
 --Effects of isopod parasites on the prawn, Palaemonetes  
pagio  
 --Feeding behavior of echinoderms, especially with  
 relation to bivalve mollusks  
 --Bivalve propagation and cultivation
- 419 O'Connor, James Vincent MST  
 Instructor  
 Science Teaching Center and Geology  
 University of Maryland  
 Room 17 - STC - Education Building  
 College Park, Maryland 20742  
 (301) 454-2024  
 D-1, G-6, H-2  
 --Field research on the estuarine environment for  
 secondary and elementary earth science teachers  
 --Effects of catastrophic natural events in changing  
 the estuarine system  
 --Translation of science data available for the Bay  
 into practical classroom materials that can be  
 utilized by both teachers and students
- \*420 O'Connor, Joel S. PhD  
 Research Ecologist  
 Marine Science Research Center  
 State University of New York  
 Building J  
 Stony Brook, New York 11790  
 (516) 286-9725  
 B-8, B-9, Biometrics  
 --Synthesis of information on the ecology of estuaries  
 and the coastal zone, especially of fishes and  
 benthic invertebrates

- Applications of sampling statistics and computer science to estuarine ecology
- Potential of fishes and benthic invertebrates as protein sources

- \* 421 O'Dell C. Jay MS  
 Project Leader  
 Fish and Wildlife Administration  
 Maryland Department of Natural Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5361  
 B-8, B-9, Stream inventory and ecology  
 --Fisheries biology, especially of anadromous fishes;  
 including studies of species presence, of spawning areas, and of water quality to ascertain its effects on fish passage and spawning
- \* 422 O'Malley, Maria Lisabeth MS  
 Aquatic Biologist  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 23  
 B-8, B-12, E-3  
 --Study of trophic levels, especially of the benthos and phytoplankton
- \* 423 Olmon, Janet Evelyn BS  
 Graduate Student  
 Department of Physiology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 B-1, B-12, C-2
- 424 Oostdam, Bernard Lodewyk PhD  
 Professor  
 Earth and Space Science  
 Millersville State College  
 Millersville, Pennsylvania 17551  
 (717) 872-5411 ext. 304  
 D-1, D-8, E-2  
 --Sediment transport  
 --Estuarine circulation  
 --Marine waste disposal

- 425 Orear, Charles W. PhD  
 Assistant Professor  
 Biology Department  
 East Carolina University  
 P.O. Box 2577  
 Greenville, North Carolina 27834  
 (919) 758-6718  
 B-9, B-19, C-9  
 --Fisheries biology; including nutrition, especially  
 of the striped bass, and pollution physiology  
 --Distribution and types of dissolved organics in  
 eastern North Carolina
- \* 426 Orris, Patricia Kay MS  
 Faculty Research Assistant  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3821  
 B-6, B-8, B-16  
 --Benthic macro-algae; including taxonomy, inventory,  
 ecology, physiology and culture methods
- \* 427 Orth, Robert Joseph MS  
 Graduate Student  
 Zoology Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-5410  
 B-1, B-4, B-8, B-12, B-18, C-8  
 --Effects of eelgrass (Zostera marina) on the community  
 structure of benthic fauna  
 --Benthic ecology  
 --Wetlands ecology
- \* 428 Ott, Franklyn Dewayne PhD  
 Assistant Professor, Marine Scientist  
 Department of Microbiology and Pathology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 48  
 A-4, B-2, B-6, B-13, B-19, E-3, G-6, Phycology  
 --Biology of marine algae; including aspects of floral  
 composition, systematics, life cycles, periodicity,  
 ecology, and the effect of pollution on these  
 factors  
 --Phytoplankton biology; including culturing to provide  
 rearing of invertebrate larvae and the remote  
 sensing of blooms to establish floral composition,  
 productivity areas, and the relationships of  
 invertebrates and vertebrates which feed on these  
 phytoplankton



- \* 429 Otto, Sara Virginia BA  
 Laboratory Scientist II  
 NOAA  
 National Marine Fisheries Service  
 Biological Laboratory  
 Oxford, Maryland 21654  
 (301) 226-5193  
 B-2, B-12, Molluscan shellfish pathology  
 --Molluscan biology; including distribution of  
 parasites affecting oysters and other shellfish,  
 experimental raft culture of oysters to compare  
 off-bottom culture with on-bottom culture, and  
 comparison of mortality and infection rates of a  
 stock of oysters from a diseases-enzootic area  
 and in a stock from a non-enzootic area
- \* 430 Outten, William Alonza MS  
 Biologist III  
 Fisheries Management  
 Maryland Fish and Wildlife Administration  
 State Office Building  
 Annapolis, Maryland 21012  
 (301) 267-5151  
 B-9, B-12, Blue crab management  
 --Shellfish management, especially of blue crabs
- 431 Overstreet, Robin Miles PhD  
 Department Head, Parasitologist  
 Department of Parasitology  
 Gulf Coast Research Laboratory  
 P.O. Box AG  
 Ocean Springs, Mississippi 39564  
 (601) 875-2244  
 B-8, B-9, B-15  
 --Parasitology; including taxonomy of helminths and  
 protozoans; diseases and their control in mariculture;  
 ecology, host-parasite relationships and life  
 histories of the parasites of fishes and invertebrates
- 432 Owens, Olga Von Hartz PhD Cand.  
 Graduate Student  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20742  
 B-6, B-13, C-2, Cell physiology  
 --Kinetics of ATP formation in algae

433 Pacheco, Anthony L. MA  
Fishery Biologist  
Middle Atlantic Coastal Fisheries Center  
National Marine Fisheries Service  
Highlands, New Jersey 07732  
(201) 872-0200 ext. 31

B-8, B-9, B-18

--Fisheries biology; including the distribution of juvenile fishes in waters of the New York Bright and contiguous waters, age and growth studies of spot, gray trout, and croakers and abundance estimates of juvenile menhaden

\* 434 Palmer, Harold Dean PhD  
(Manager) Aquatic Physical Science  
Ocean Research Laboratory  
Westinghouse Electric Corporation  
P.O. Box 1771  
Annapolis, Maryland 21404  
(301) 765-5772

D-1, D-8, E-2

--Geological processes; including erosion, transportation and deposition of sediments in estuarine environments

\* 435 Paparella, Michael W. MS  
Extension Specialist  
Natural Resources Institute  
University of Maryland  
Box 351  
Crisfield, Maryland 21817  
(301) 968-1655

A-3, G-6, H-2, Extension service to seafood industry

--Seafood processing including assistance provided to processors in the area of food science and technology, mechanization of oyster-shucking and crab-picking, studies on individual quick freezing of seafoods, and product and process development, especially in the area of by-product and unused species utilization

436 Parker, R.O. Jr. MS  
Fishery Biologist  
National Marine Fisheries Service  
Atlantic Estuarine Fisheries Center  
Pivers Island  
Beaufort, North Carolina 28516  
(919) 728-4595

B-9, B-18, Dynamics of artificial reefs

--Fisheries biology; including menhaden tagging studies

--Artificial reef studies

- 437 Patten, Bernard C. PhD  
 Professor  
 Zoology Department  
 University of Georgia  
 Athens, Georgia 30610  
 (404) 542-8134  
 B-17, B-19, G-5  
 --Total ecosystem modeling and systems analysis
- \*438 Pauley, Gilbert B. PhD  
 Fishery Research Biologist  
 NOAA  
 National Marine Fisheries Service  
 Biological Laboratory  
 Oxford, Maryland 21654  
 (301) 226-5193  
 B-9, B-12, B-13, B-15, Pathology and immunology of  
 marine animals  
 --Utilization of various techniques of immunology,  
 immunochemistry, and microbiology to study  
 various immunological responses of marine fish  
 and shellfish from Chesapeake Bay
- 439 Pearce, John Bodell PhD  
 Officer-in-Charge  
 Sandy Hook Laboratory  
 NOAA  
 National Marine Fisheries Service  
 Highlands, New Jersey 07732  
 (201) 872-0200  
 B-1, B-12, E-3  
 --Effects of ocean disposal of dredging spoils and  
 sewage sludge  
 --Ecology of symbiotic brachyuran crustaceans  
 --Ecology of epibenthic communities
- \*440 Pearson, James Gareth MA  
 1st Lt.  
 Biomedical Laboratory  
 U.S. Army  
 Edgewood Arsenal  
 Edgewood Arsenal, Maryland 21010  
 (301) 671-2586  
 B-8, B-9, E-3  
 --Fisheries biology; including community structure of  
 nearshore fish populations in an estuarine environment  
 and fish toxicological studies dealing with  
 establishing "safe" environmental levels of  
 testing of chemical agents at Edgewood Arsenal  
 --Aquatic monitoring of industrial operations at  
 Edgewood Arsenal

- \*441 Peddicord, Richard Knox                      PhD Cand.  
 Graduate Research Assistant  
 Department of Ecology-Pollution  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 B-8, B-12, E-3  
 --Ecology of invertebrates; including its relationship  
 to pollution, especially for Rangia cuneata
- 442 Pequegnat, Linda H.                              PhD  
 Research Scientist  
 Oceanography  
 Texas A and M University  
 College Station, Texas 77843  
 (713) 846-2192  
 B-4, B-12, E-2, Marine Crustacea  
 --Systematics and zoogeography of deep-sea decapod  
 crustaceans (caridean shrimps and galatheid  
 crabs in particular) and of bathypelagic  
 mysidacean shrimps  
 --Coral reef decapods in the Gulf of Mexico  
 --Biofouling studies  
 --World-wide distributions of bathypelagic mysidaceans
- \* 443 Perry, Matthew Calbraith                      MS  
 Wildlife Biologist  
 Patuxent Wildlife Research Center  
 Bureau of Sport Fisheries and Wildlife  
 Laurel, Maryland 20810  
 (301) 776-4880 ext. 286  
 B-2, B-8, Wildlife biology  
 --Effects of environmental pollution on waterfowl,  
 especially the black duck and the canvasback  
 duck, and their habitats; including studies of  
 eggshell thinning due to pesticide treated food,  
 of local and long-range movements in relation  
 to area food supplies and of pollutant-treated  
 invertebrates that serve as food for canvasbacks
- 444 Peters, David Stewart                              PhD  
 Fishery Biologist  
 National Marine Fisheries Service  
 Beaufort, North Carolina 28516  
 (919) 728-4595  
 B-5, B-16, E-3  
 --Measurements of the effects of environmental changes  
 on various processes of fish metabolism including  
 feeding and growth rates, food conversion efficiency,  
 and nitrogen metabolism

- \* 445 Pfitzenmeyer, Hayes T. MS  
 Research Associate  
 Natural Resources Institute  
 University of Maryland  
 P.O. Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281 ext.47  
 B-4, B-8, B-12  
 --Benthic invertebrate ecology  
 --Biology and population studies of Mya arenaria
- \* 446 Pheiffer, Thomas H. MED  
 Interagency Planning Coordinator  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext.8  
 E-1, E-3, G-1, H-2, H-3  
 --Development of a management entity for the Chesapeake Bay System in order to utilize the full potential of the hydro-dynamic mathematic model of the Bay now being tested at the Annapolis Field Office
- 447 Phillips, James W. MS  
 Assistant Professor of Biology  
 Biology Department  
 Westfield State College  
 Western Avenue  
 Westfield, Massachusetts 01085  
 (413) 568-3311 ext.76  
 B-5, B-9, Fish embryology  
 --Effects of an atomic reactor on fish egg development
- 448 Phillips, Philip Julian PhD  
 Biologist-Ecologist  
 Environmental Resources Branch  
 Corps of Engineers  
 North Atlantic Division  
 90 Church Street  
 New York, New York 10007  
 (212) 264-6912  
 B-8, B-12, B-17  
 --Cnidarian systematics, zoogeography and ecology, especially of Scyphozoa, hydromedusae, and Siphonophora  
 --Benthic community studies, particularly with respect to burrowing Crustacea

- 449 Picciolo, Anthony Ronald PhD  
 Chief Data Acquisition Branch  
 Operations Division  
 National Oceanographic Data Center  
 Rockville, Maryland  
 (202) 426-9070  
 B-1, E-2, G-1  
 --National data management of oceans and estuaries
- \* 450 Pierce, Jack Warren --  
 Geologist  
 Division of Sedimentology  
 Smithsonian Institution  
 Washington, D.C. 20560  
 (202) 381-5862  
 D-1, D-8, E-2  
 --Suspended particulate matter, primarily sedimentary  
 particles, and their interaction with organic  
 and inorganic material  
 --Flux of sediment
- \* 451 Pierce, Sidney K. PhD  
 Assistant Professor  
 Zoology Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-5197  
 B-1, B-8, B-12, B-16  
 --Cellular mechanisms underlying the physiological  
 interactions of some Chesapeake Bay invertebrates  
 with their environment; including osmotic and ionic  
 regulation and nitrogen excretion in Modiolus  
demissus, salinity studies of Diadumone, and  
 electrophysiology of the nervous system development  
 in the polyp of Chrysaora quinquecirrha  
 --Suitability of Modiolus demissus for studying the  
 physiological basis of thermal tolerances
- \* 452 Pinkham, Carlos Frank Amory PhD  
 Cpt. U.S. Army  
 Ecology Program  
 Molecular Biology Branch  
 Biomedical Research Laboratory  
 Edgewood, Arsenal, Maryland 21010  
 (301) 671-2586  
 B-18, B-20, E-1  
 --Terrestrial vertebrate research dealing with population  
 dynamics of marsh and lowland vertebrates  
 --Environmental monitoring of Edgewood Arsenal testing  
 activities

- \* 453 Pluhowski, Edward John PhD  
Research Hydrologist  
Water Resources Division  
U.S. Geological Survey  
4903 Dowlais Court  
Rockville, Maryland 20853  
(212) 343-2640  
D-8, F-6, Hydrology  
--Determining runoff in the Rhode River watershed  
--Sediment production  
--Temperature patterns in streams
- 454 Poluhowich, John J. --  
Associate Professor  
Biology Department  
University of Bridgeport  
Dana Hall  
Bridgeport, Connecticut  
(203) 384-0711 ext. 464  
B-5, B-16, C-2  
--Physiology of the American eel, Anguilla rostrata,  
with emphasis on characterizing certain blood  
parameters as these animals migrate in the estuary
- 455 Porter, Hugh J. MS  
Assistant Professor  
Institute of Marine Sciences  
University of North Carolina  
P.O. Drawer 809  
Morehead City, North Carolina 28557  
(919) 726-6841 ext. 7  
B-8, B-9, Molluscan taxonomy  
--Taxonomic, ecological survey, aquaculture, and  
reproductive studies of Mollusca, especially  
of two quahog species, inhabiting the estuarine  
and marine waters of North Carolina
- \* 456 Powell, Edwin Huff --  
Manager  
Windmill Point Oyster Co.  
Urbana, Virginia 23175  
(703) 758-2357  
A-1, B-2, H-1  
--Conception, design, construction and operation of  
an economically feasible oyster hatchery

- \* 457 Power, Garrett LL M  
 Professor of Law  
 School of Law  
 University of Maryland  
 500 West Baltimore Street  
 Baltimore, Maryland 21201  
 (301) 528-7661  
 G-2, G-4, H-1, H-2, H-3, Environmental law  
 --Legal problems of Chesapeake Bay management  
 --Legal and economic problems of wetland management
- 458 Price, Kent Sparks PhD  
 Associate Professor-Assistant Dean  
 College of Marine Studies  
 University of Delaware  
 P.O. Box 286  
 Lewes, Delaware 19958  
 (302) 645-6676  
 B-1, B-2, B-5  
 --Ecology of estuaries  
 --Water regulation and reproduction in elasmobranchs  
 --Temperature requirements in gonadal development in  
 the American oyster  
 --Mariculture  
 --Estuarine fisheries biology
- 459 Price, Thomas John MS  
 Fishery Biologist Research  
 Department of Commerce  
 National Marine Fisheries Service  
 Atlantic Estuarine Fisheries Center  
 Beaufort, North Carolina 28516  
 (919) 728-4595 ext.46  
 B-1, B-8, B-12  
 --Studies on species composition, standing crop, and  
 energy flow of benthic macroinfauna in estuaries  
 near Beaufort, North Carolina  
 --Radiation biology; including studies of the uptake,  
 assimilation and loss of various radionuclides  
 by marine organisms and tracer studies using  
 radionuclides to determine the feeding selectivity  
 of marine invertebrates
- 460 Pristas, Paul Joseph BS  
 Fishery Biologist  
 Department of Commerce  
 NOAA  
 National Marine Fisheries Service  
 P.O. Box 4218  
 Panama City, Florida 32401  
 (904) 234-6541  
 B-1, B-8, B-9



--Occurrence of coastal benthic fish and crustaceans  
in St. Andrews Bay, Florida

461 Psuty, Norbert Phillip PhD  
Assistant Director  
Marine Sciences Center  
Rutgers University  
New Brunswick, New Jersey 08903  
(201) 932-3081

D-5, E-1, Remote sensing

--Measuring and mapping the standing crop productivity  
in salt marshes by remote sensing techniques; use  
of color infrared photography for species  
identification

--Sediment migration and beach response at Sandy Hook,  
New Jersey

\* 462 Raney, Edward C. --  
Owner and Director  
Ichthyological Associates  
301 Forest Drive  
Ithaca, New York 14850  
(607) 272-2455

B-1, B-5, B-8, B-9, B-20

--Fisheries biology; including systematics, ecology  
and behavior, especially of the C and D Canal,  
the Susquehanna Flats area, and the lower  
Susquehanna River

\* 463 Rasin, Vaclav James Jr. BS  
Faculty Research Assistant  
Fisheries  
University of Maryland  
P.O. Box 38  
Solomons, Maryland 20688  
(301) 326-4281 ext. 72

B-5, B-8, B-9

--Determination of the effects on fish eggs and larvae  
of the widening and deepening of the Chesapeake  
and Delaware Canal

\* 464 Rawls, Charles Kelso Jr. MS  
Research Associate  
Natural Resources Institute  
Chesapeake Biological Laboratory  
University of Maryland  
Box 38  
Solomons, Maryland 20688  
(301) 326-4281 ext. 29

B-8, B-20, E-3, Wetlands ecology and characterization,  
Wildlife management

--Investigation of Eurasian watermilfoil and other

- noxious aquatic vegetative species; including studies of their control, distribution, toxicology, concentrations of herbicide residues, etc.
- Distribution and changes in abundance of aquatic and marsh vegetation in the Chesapeake Bay
- Pesticide residues in Bay waters and biota
- Classification, indexing, characterization, ecology and vertebrate production of wetlands
- Sublethal effects of pesticides on Bay fauna and flora

\* 465 Reber, Michael James BS

Faculty Research Assistant  
Environmental Research  
University of Maryland  
Natural Resources Institute  
P.O. Box 131  
Solomons, Maryland 20688  
(301) 326-4281

B-1, B-8, B-12

- Control of the sea nettle in Chesapeake Bay
- Biological photography of marine organisms

466 Recksiek, Conrad W. MA

Graduate Student  
Zoology Department  
Murray Hall  
University of Maine  
Orono, Maine 04473  
(207) 581-7941

B-5, B-8, B-9

- Fisheries biology; including the distribution of pelagic fishes in the Sheepscot River Estuary, Wiscasset, Maine, and of larval fishes in Narragansett Bay, Rhode Island

\*467 Rees, Colin Pritchard PhD

Assistant Professor  
Zoology Department  
University of Maryland  
College Park, Maryland 20742  
(301) 454-5410

B-1, B-8, B-12

- Amphipoda; including the dynamics and interrelationships of mixed populations of selected species in the Bay, salinity preferences of selected species, and the distribution and ecology of Gammaridae and associated organisms in the Patuxent River System

- \*468 Reintjes, John William MS  
 Supervisory Fishery Biologist Research  
 Department of Commerce  
 NOAA  
 National Marine Fisheries Service  
 Beaufort, North Carolina 28516  
 (919) 728-4595  
 B-5, B-9, B-18  
 --Early life histories and population dynamics of  
 menhaden and other clupeid fishes
- 469 Rhodes, Edwin W. BS  
 Fishery Biologist (Research)  
 NOAA  
 National Marine Fisheries Service  
 Rogers Ave.  
 Milford, Connecticut 06460  
 (203) 878-2459 ext.26  
 B-2, B-9, B-12  
 --Development of methods for rearing invertebrate  
 larvae, particularly bivalve mollusks
- \*470 Rhodes, William R. MS  
 Assistant Marine Scientist  
 Department of Ichthyology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.64  
 B-1, B-8, B-16  
 --Determination of the biological structure of estuarine  
 systems, the relationship of individuals to the  
 biological and physical environment and applications  
 of this knowledge in fisheries management
- 471 Rice, Theodore R. PhD  
 Director  
 U.S. Department of Commerce  
 Atlantic Estuarine Fisheries Center  
 National Marine Fisheries Service  
 Beaufort, North Carolina 28516  
 B-8, B-9, Radioecology  
 --Estuarine studies; especially on fish; with special  
 emphasis on radioecology, elemental cycling,  
 primary productivity, and population dynamics  
 of menhaden, game fish and artificial reefs

- 472 Rich, Peter H. PhD  
 Research Associate  
 Biology Department  
 Brookhaven National Laboratory  
 Upton, New York 11973  
 B-6, B-8, B-19  
 --Benthic carbon metabolism, primary production of  
 aquatic macrophytes and roles of dissolved  
 organic carbon in a tidal salt marsh in New York
- \* 473 Richards, Clarence Edward MS  
 Assistant Marine Biologist  
 Department of Ichthyology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 29  
 B-9, B-18, G-5  
 --Fisheries biology; including age, growth, distribution,  
 and population studies especially of food and  
 game fishes
- 474 Riser, Nathan Wendell PhD  
 Director and Biology Professor  
 Marine Science Institute  
 Northeastern University  
 Nahant, Massachusetts 01908  
 (617) 581-1170  
 B-4, B-7, B-12  
 --Bionomics of marine Turbellaria and Nemertinea
- \* 475 Ritchie, Douglas Edward Jr. AB  
 Faculty Research Assistant  
 Fisheries Department  
 Natural Resources Institute  
 University of Maryland  
 P.O. Box 38  
 Solomons, Maryland 20688  
 (301) 326-4281 ext. 20  
 A-1, B-5, B-9, Ecology of fishes  
 --Adult fisheries biology in Chesapeake Bay; including  
 tagging studies
- \* 476 Rivkin, Samuel BS  
 Department of Microbiology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia  
 (703) 642-2111  
 B-2, B-8, B-12

--Culturing invertebrates, especially the oyster  
Crassostrea virginica and copepods  
 --Reproductive cycle studies

\*477 Robbins, Chandler S. MS  
 Chief, Migratory Nongame Bird Studies  
 Wildlife Research Division  
 Department of the Interior  
 Migratory Bird Populations Station  
 Laurel, Maryland 20810  
 (301) 776-4880 ext. 281  
 B-14, B-18, E-1

478 Roberts, Henry Barndt HS  
 Senior Museum Specialist  
 Division of Crustacea  
 Smithsonian Institution  
 Washington, D.C. 20560  
 (202) 381-5781  
 B-12, Taxonomy, Invertebrate paleontology  
 --Taxonomy of brachyuran crabs

479 Roberts John L. PhD  
 Professor  
 Zoology Department  
 University of Massachusetts  
 Amherst, Massachusetts 01002  
 (413) 545-0157  
 B-5, B-12, B-16  
 --Comparative physiology and physiological ecology  
 --Temperature adaptations of invertebrates and fishes  
 with reference to the influence of photoperiod  
 --Fisheries biology; including neural control of  
 ventilation in fishes and physiology of fish  
 ventilation and circulation with reference to  
 habitat type, activity and thermal stress

480 Roberts, Morris H. Jr. PhD  
 Program Director, Invertebrate Studies  
 Invertebrate Division  
 Aquatic Sciences Inc.  
 2624 N.W. 2nd Avenue  
 Boca Raton, Florida 33432  
 (305) 391-0091  
 B-2, B-12, E-3  
 --Larval development and culture of Callinectes sapidus,  
 and other decapods found in Chesapeake Bay  
 --Bioassay of pesticides with decapod larvae

481 Roper, Clyde F.E. PhD  
Curator  
Department of Invertebrate Zoology  
Division of Mollusks  
NMNH  
Smithsonian Institution  
Washington, D.C. 20560  
(202) 381-5605

B-4, B-12, E-2

--Cephalopoda; including determinations of occurrence,  
abundance, seasonality, age group composition,  
spawning localities, etc.

482 Ropes, John Warren BA  
Fishery Biologist Research  
Department of Commerce  
NOAA  
National Marine Fisheries Service  
Oxford, Maryland 21654  
(301) 226-5193

B-1, B-9, B-18

--Biology and population dynamics of the surf clam,  
Spisula solidissima

\*483 Rose, Curt Dean PhD  
Research Associate Professor  
Department of Fisheries  
Chesapeake Biological Laboratory  
University of Maryland  
Box 38  
Solomons, Maryland 20688  
(301) 326-4281 ext. 50

B-2, B-8, B-9

--Oyster biology

--Shellfish aquaculture

--Effects of heated effluents and oil pollution on  
shellfish

\*484 Rosenfield, Aaron PhD  
Director, Pathology Investigations  
Department of Commerce  
National Marine Fisheries Service  
Oxford, Maryland 21654  
(301) 226-5193

B-9, B-13, Pathobiology

--Comparative studies on the pathological responses  
of marine organisms to infectious and noninfectious  
disease agents in natural or man-altered estuarine  
and coastal environments and in mariculture  
operations in order to prevent, alleviate, or  
control mortalities of living natural resources

and to increase the efficiency of management  
and utilization of fishery resources, including  
disease diagnoses, histopathology, and micropathogen  
identification, characterization, and taxonomy  
--Biochemical and morphological manifestations of  
diseases in host organisms and in cell systems  
--Host defense mechanisms and microbial pathogenicity

485 Ruber, Ernest PhD  
Associate Professor  
Biology Department  
Northeastern University  
Boston, Massachusetts 02115  
(617) 437-2260

B-8, B-17, E-3  
--Ecology of salt marshes, especially of copepods,  
including interactions with competitors in food  
chains  
--Effects of pesticides on algae and microcrustaceans

486 Russell, Clifford Springer PhD  
Research Associate  
Resources for the Future, Inc.  
1755 Massachusetts Ave. N.W.  
Washington, D.C. 20036  
(202) 462-4400 ext. 63

E-3, H-1, Optimization modeling  
--Regional modeling for residuals (Pollution management)

487 Russell, Henry Drummond PhD  
Mollusk  
Museum of Comparative Zoology  
2001 Harvard  
Cambridge, Massachusetts 02138

B-1, B-8, B-12  
--Ecology and life history studies of the Nudibranchia

\*488 Rutledge, Carleton Jr. MS  
Fellow Engineer  
Oceanic Division  
Westinghouse Electric Corporation  
P.O. Box 1488  
Annapolis, Maryland 21404  
(301) 765-5739

A-2, C-4, C-7, C-9, D-8, D-9, E-1, E-2, F-7, G-1  
G-7, G-8, H-2, H-3  
--Oceanographic and meteorological monitoring systems  
--Bottom sediments and topography  
--Bottom mapping acoustic systems  
--Acoustic aids to navigation  
--Navigation and positioning systems  
--Underwater T.V. photography  
--Submersible vehicles and diver life support  
--Sonar studies

- \* 489 Ruzecki, Evon Paul MS  
Associate Marine Scientist  
Department of Physical Oceanography and Hydraulics  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 43  
E-2, F-3, G-6  
--Estuarine circulation  
--Material flux measurement at the mouth of the  
Chesapeake Bay
- 490 Ryan, David Arnold --  
Chairman  
Science Department  
The Pingree School  
Highland Street  
S. Hamilton, Massachusetts 01982  
(617) 468-4415  
G-6
- 491 Ryan, Edward P. PhD  
Associate Professor  
Department of Biology  
East Carolina University  
Greenville, North Carolina 27834  
(919) 758-6725  
B-1, B-9, B-12  
--Biology of crustaceans, especially as related to  
reproduction
- 492 Ryther, John Hood PhD  
Senior Scientist  
Biology Department  
Woods Hole Oceanographic Institution  
Woods Hole, Massachusetts 02543  
(617) 548-1400 ext. 322  
B-2, B-8, B-17, B-19, C-1, C-9, E-1, E-2, E-3  
--Development of a waste recycling system in which  
unicellular algae are grown on treated sewage  
effluent and then fed to bivalve molluscs under  
controlled conditions  
--Uptake of heavy metals, chlorinated hydrocarbons,  
and polychlorinated biphenyls by bivalve molluscs  
and other estuarine animals  
--Effects of thermal discharges on estuarine organisms  
--Marine aquaculture in general



- 493 Salla, Saul B. PhD  
 Director  
 Marine Experiment Station  
 University of Rhode Island  
 Graduate School of Oceanography  
 Kingston, Rhode Island 02881  
 (401) 792-6239  
 B-18, E-3, G-5  
 --Estuarine fish population dynamics  
 --Dredge spoil disposal evaluation
- 494 Saloman, Carl Herman BS  
 Fishery Biologist (Research)  
 Department of Commerce  
 NOAA  
 NMFS Biological Laboratory  
 75 33rd Avenue  
 St. Petersburg Beach, Florida 33706  
 (813) 360-7096  
 B-1, B-8, B-12  
 --Crustacean taxonomy  
 --Benthic population densities in relation to sediments  
 and water quality  
 --Water quality monitoring
- 495 Salvini-Plawen, Luitfried V. PhD  
 Dozent Assistant  
 Zoological Institute  
 University Vienna  
 Dr. Karl Lueger-Ring 1  
 Vienna, Austria  
 B-12  
 --Biology of the aplacophorous molluscs; including  
 ecology, distribution, and anatomy
- \*496 Sampugna, Joseph PhD  
 Assistant Professor  
 Chemistry Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-2310  
 B-8, B-12, C-2  
 --Biochemistry of estuarine inhabitants; including  
 the lipid biochemistry of the Virginia oyster
- 497 Sandifer, Paul Alan PhD Cand.  
 Assistant Marine Scientist  
 South Carolina Marine Research Laboratory  
 P.O. Box 12559  
 Charleston, South Carolina 29412  
 (803) 795-2081

B-2, B-12, B-17

- Biology and development of estuarine Crustacea, especially of decapods
- Taxonomy and biology of estuarine zooplankton
- Aquaculture

\* 498 Sapp, Ranford Michael BSEE  
Senior Engineer  
Oceanic Division  
Westinghouse Electric Corporation  
Box 1488  
Annapolis, Maryland 21404  
(301) 765-5789

A-2, E-1, E-2, F-7

- Remote (acoustical and optical) sensing of aquatic resources, characteristics and conditions
- Engineering aspects of environmental surveys and monitoring systems, and programs

499 Sawyer, Philip John PhD  
Professor  
Zoology Department  
University of New Hampshire  
Spaulding Life Science Building  
Durham, New Hampshire 03824  
(603) 862-2106

B-5, B-8, B-17

- Ichthyoplankton studies

\*500 Sawyer, Thomas Knowlton MS  
Staff Specialist  
Department of Commerce  
Department of the Interior Building  
1800 C Street N.W.  
Washington, D.C.  
(202) 343-6643

B-1, B-8, B-9, B-12, B-15, E-3

- Marine Protozoa
- Marine diseases

501 Schick, Daniel Frederick MS  
Marine Resources Scientist  
Research Division  
Maine Sea and Shore Fisheries  
McKown Point  
West Boothbay Harbor, Maine 04575  
(207) 633-5572

B-2, B-12, H-2

- Biology of the bloodworm with reference to its adaptability to the concentrations and controls of aquaculture and to environmental stresses

- 502 Schmitt, Waldo Lasalle PhD  
 Research Associate (Retired)  
 Division of Crustacea  
 Smithsonian Institution  
 Washington, D.C. 20560  
 (202) 381-5313  
 B-1, B-12, Taxonomy of Crustacea  
 --American Pinnotherid crabs; some are parasitic  
 and/or commensals of oysters and other shellfish
- 503 Schopf, Thomas Joseph Morton PhD  
 Assistant Professor  
 Geophysical Sciences  
 University of Chicago  
 5734 Ellis  
 Chicago, Illinois 60637  
 (312) 753-8163  
 B-1, B-12, E-2  
 --Ecology and distribution of Bryozoa
- \*504 Schott, C. Donald MS  
 Biologist  
 Plant Ecology  
 Experimental Medical Branch  
 Biomedical Laboratory  
 Edgewood Arsenal, Maryland 21010  
 (301) 671-2247  
 B-6, C-6, E-1, E-3  
 --Plant survey of Edgewood Arsenal, Maryland  
 --Assessment of pesticide toxicity to plants  
 --Ecological damage assessment in vitro of manufacturing  
 wastes and by-products
- \*505 Schultz, Leonard B. PhD  
 Curator of Fishes  
 Smithsonian Institution  
 Research Associate  
 Chesapeake Biological Laboratory  
 Solomons, Maryland 20688  
 B-1, B-5  
 --Biology of jellyfish  
 --Fisheries biology
- \*506 Schwartz, Frank Joseph PhD  
 Professor  
 Institute of Marine Sciences  
 University of North Carolina  
 Box 809  
 Morehead City, North Carolina 28557  
 (919) 726-6841

B-5, B-9, B-20, Ichthyology  
--Fisheries biology; including systematics, zoogeography,  
and ecology  
--Sea turtles  
--Elasmobranchs

\*507 Scott, Frederic Robert MA  
Proprietor  
Scott Associates  
513 Mutual Building  
Richmond, Virginia 23219  
(703) 643-4094

B-14, G-2, H-3  
--Avian populations; including population fluctuations  
and reproductive rates of the Bald Eagle and of  
breeding populations of colonial herons and  
related species

\*508 Scott, Roy Francis BS  
Biologist II  
Maryland Department of Natural Resources  
Fish and Wildlife Administration  
State Office Building  
Annapolis, Maryland 21401

A-1, B-9, H-2  
--Fisheries biology, especially of the striped bass;  
including tagging studies, determination of  
levels of mercury and pesticides in the tissues,  
determination of the presence of Goezia, and  
study of the relationship of egg viability to  
size of the female

\*509 Scott, Russell Cecil MSE  
Proprietor  
R.C. Scott Associates  
513 Mutual Building  
Richmond, Virginia 23219  
(703) 643-4094

E-1, E-3, G-2, G-6

510 Scotton, Lewis Nailor MS  
Research Assistant  
Biology Division  
School of Marine Science  
University of Miami  
10 Rickenbacker Causeway  
Miami, Florida 33149  
(305) 350-7334

B-5, B-8  
--Fisheries biology; including the ecology and distribution  
of postlarval fishes of Southern Biscayne Bay,

Florida; larval systematics and ecology; and the effects of environmental stresses, including thermal effluents, on the occurrence of fish larvae

--Conservation of the environment

511 Seamans, Richard Goss, Jr. BS  
Chief, Inland and Marine Fisheries  
New Hampshire Fish and Game Department  
34 Bridge Street  
Concord, New Hampshire 03301  
(603) 271-2501

B-1, B-9, H-2

--Northern lobster stock studies, fin-fish inventory,  
and introduction and restoration of anadromous fish

\* 512 Seliger, Howard Harold PhD  
Professor  
Biology Department  
Johns Hopkins University  
Baltimore, Maryland 21218  
(301) 366-3300 ext. 203

B-17, E-1, G-5

--Plankton ecology

--Phytoplankton primary production

--Effects of light on photosynthesis and phototaxis

--Measurements of spectral distributions of underwater light

\* 513 Shaw, William Neil BS  
Fishery Research Biologist  
Department of Commerce  
National Marine Fisheries Service  
Oxford, Maryland 21654  
(301) 226-5193

A-1, B-2, B-12

--Shellfish aquaculture and extension in Chesapeake Bay

\* 514 Shearer, Carol Ann PhD  
Faculty Research Assistant  
Botany Department  
University of Maryland  
H.J. Patterson Hall  
College Park, Maryland 20742  
(301) 454-3818

B-8, B-13, E-3

--Taxonomy, ecology, and physiology of estuarine fungi;  
including investigation of the role of fungi  
in the wetlands ecosystem and the effects of  
the discharge of heated water on fungal distribution

- \* 515 Shetton, Lewis Roller BA  
 Graduate Student  
 Department of Crustaceology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 B-1, B-9, B-12  
 --Biology of the rock crab, Cancer irroratus, in  
 Virginia coastal waters
- 516 Shevenell, Thomas Cortland --  
 Research Associate  
 Jackson Estuarine Laboratory and Earth Science  
 Department  
 University of New Hampshire  
 Durham, New Hampshire 03824  
 (603) 862-1719  
 D-1, D-8, Suspended sediment  
 --Transport of suspended sediments; including the  
 relationships between suspended sediment  
 distribution and the physical erosion and transport  
 mechanisms such as current velocity, wind wave  
 activity and net estuarine circulation on annual,  
 daily and tidal cycle scales
- 517 Short, Robert B. PhD  
 Professor  
 Biological Science Department  
 Florida State University  
 Tallahassee, Florida 32306  
 (305) 599-3122  
 B-15  
 --Structure and biology of trematodes  
 --Biology of Dicyemid mesozoans
- 518 Shuster, Carl Nathaniel Jr. PhD  
 Ecologist  
 Office of Water Programs  
 Environmental Protection Agency  
 Crystal Mall, Building 2  
 Washington, D.C. 20460  
 (703) 557-7725  
 B-1, B-8, B-12  
 --Considerations regarding overall environmental impacts  
 --Natural history and ecology of Xiphosura

- 519 Siegel, I. Myra MA  
 Assistant to the Director and Editor  
 TRIGOM  
 96 Falmouth Street  
 Portland, Maine 04103  
 (207) 773-2981 ext. 306  
 B-1, E-2, Data gathering and reporting, Marine science  
 editing and writing  
 --Marine ecology  
 --Invertebrate biology  
 --Plankton biology  
 --Writing, editing and abstracting for marine science  
 publications, including literature research  
 and bibliographic compilation
- 520 Siegel, Robert Edward MA  
 Instructor  
 Department of Marine Science  
 Southern Maine Vocational Technical Institute  
 Fort Road  
 South Portland, Maine 04106  
 (207) 799-7303 ext. 67  
 B-1, B-8, E-2  
 --Photographic record of the invertebrates of Casco Bay  
 --Littoral zone ecology
- \* 521 Sieling, Fred W. MS  
 Deputy Director  
 Fish and Wildlife Administration  
 State of Maryland  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5678  
 A-1, B-1, B-2, B-5, B-8, B-9, B-12, C-4, C-7, D-1,  
 D-8, E-1, F-6, G-2, H-2, H-3, Shellfish management  
 --Studies of soft and hard clams, estuarine fish, and  
 oyster ecology
- \* 522 Sieling, Frederick William III MA  
 Fisheries Extension Agent  
 Fish and Wildlife Administration  
 State of Maryland  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5438  
 A-1, B-1, B-2, H-1, H-2, H-3  
 --Hard clam research, especially of population trends

- \* 523 Simmonds, Willard Irving Jr. HS  
 Chemist  
 Department of Limnology  
 Academy of Natural Sciences of Philadelphia  
 Benedict Estuarine Laboratory  
 Benedict, Maryland 20612  
 (301) 274-3194  
 C-9, Water chemical concentrations and associated plankton communities  
 --Estuarine concentrations of water chemical species, with emphasis on their horizontal and vertical distributions, and their associations with planktonic organisms
- 524 Simmons, George M. Jr. PhD  
 Assistant Professor of Biology  
 Biology Department  
 Virginia Polytechnic Institute and State University  
 Blacksburg, Virginia 24061  
 (703) 552-6679  
 B-2, B-8, B-11, B-12, B-17, B-19, C-9, E-1, E-3, F-6, G-6, G-7, H-2, H-3  
 --Eutrophication
- \*525 Sipple, William Stanton MA  
 Natural Resource Planner  
 Wetlands Division  
 Department of Chesapeake Bay Affairs  
 State Office Building  
 Annapolis, Maryland 21402  
 (301) 267-5774  
 B-6, Wetland ecology  
 --Tidal wetlands studies; including geographical distribution, distribution in relation to salinity, amount of tidal inundation and soil texture in vascular plants and ecological effects of spoil disposal
- \*526 Slaughter, Turbit H. MA  
 Geologist  
 Estuarine Geology  
 Maryland Geological Survey  
 214 Latrobe Hall  
 The Johns Hopkins University  
 Baltimore, Maryland 21218  
 (301) BE5-0771  
 --Sedimentation, erosion and littoral processes in the Chesapeake Bay and on the Atlantic Coast



- 527 Smayda, Theodore John PhD  
 Professor, Oceanography and Botany  
 Graduate School of Oceanography  
 University of Rhode Island  
 Kingston, Rhode Island 02881  
 (401) 792-6171  
 B-17, B-19, Phytoplankton  
 --Factors, including nutrients, grazing, and physical  
 factors responsible for the seasonal cycles  
 in phytoplankton abundance and species succession  
 --Bioassay of water masses  
 --Physiological ecological studies of natural communities  
 --Culturing of phytoplankton and zooplankton  
 --Quantitative explanations for a model of seasonal  
 phytoplankton abundance and species succession  
 in communities in general, and in Narragansett  
 Bay, Rhode Island, in particular
- 528 Smith, Bruce William MS  
 Staff Biologist  
 Engineering Department  
 Public Service Company of New Hampshire  
 1000 Elm Street  
 Manchester, New Hampshire 03105  
 (603) 669-4000 ext. 429  
 B-2, B-8, B-12  
 --Aquaculture of commercially important species in  
 thermally charged waters  
 --Entrapment of fish and invertebrates on power  
 generating station intake screens  
 --Entrainment effects on estuarine plankton
- \*529 Smith, Craig Lasalle PhD  
 Associate Marine Scientist  
 Division of Geological Oceanography  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext. 74  
 C-3, C-6, E-3  
 --Marine organic chemistry  
 --Oil pollution  
 --Effects and fate of oil spills  
 --Organic geochemistry of sediments

- \*530 Smith, Richard Allmon MS  
 Research Associate  
 Department of Geography and Environmental  
 Engineering  
 The Johns Hopkins University  
 Charles and 34th Streets  
 Baltimore, Maryland 21218  
 (301) 366-3300 ext. 286  
 B-17, B-19, G-5  
 --Phytoplankton production in the Chesapeake Bay  
 region; including studies of production measurement  
 techniques, diurnal periodicities in production  
 rates, and effects of thermal discharges on  
 phytoplankton production  
 --Development of models describing phytoplankton  
 production and growth as functions of controlling  
 factors, with particular emphasis on the effects  
 of temperature change
- 531 Smith, Roland Fred PhD  
 Administrator  
 Chief, Division of Living Resources  
 Office of Marine Resources  
 Department of Commerce  
 NOAA  
 6010 Executive Building  
 Rockville, Maryland 20852  
 (301) 496-8472  
 B-1, B-8, B-9, Administration  
 --Estuarine ecology  
 --Coastal zone management  
 --Fisheries biology  
 --Pollution studies
- \*532 Smith, Ronal William MS  
 Resident Biologist  
 College of Marine Studies  
 University of Delaware  
 Drawer 286  
 Lewes, Delaware 19958  
 (302) 645-6676  
 A-1, B-5, B-8, B-9  
 --Fin fish research  
 --Estuarine ecology of the Delaware Bay and the C and  
 D Canal

- \* 533 Smith, Susan Kurrle BS  
 Biologist  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext. 23  
 B-1, B-8, B-17  
 --Studies of the different trophic levels of the  
 estuarine community, especially of phytoplankton  
 and fishes
- 534 Smith, Wade Barnes MA  
 Department of Environmental Engineering  
 University of Florida  
 Gainesville, Florida 32601  
 (904) 392-0834  
 B-8, B-19, G-5  
 --Structure and function of estuarine ecosystems  
 adapting to inputs due to the activities of man  
 --Utilization of principles of ecosystem self-design  
 to produce new systems capable of most effectively  
 serving as an interface between the waste flows  
 of man-dominated systems and estuaries  
 --Adaptations of estuarine systems to power plant  
 thermal addition inflows
- 535 Smith, Walter Leonard --  
 Head, Marine Science and Technology  
 Marine Science and Technology Department  
 Suffolk County Community College  
 College Road  
 Selden, New York 11784  
 (516) 732-1600 ext. 243  
 B-5, B-12, E-2  
 --Diseases of cold blooded animals
- \* 536 Sohn, I. Gregory PhD  
 Geologist  
 U.S. Geological Survey  
 Department of the Interior  
 Washington, D.C. 20242  
 (202) 343-2885  
 B-12  
 --Ostracoda studies

- \* 537 Sommer, Sheldon E. PhD  
 Assistant Professor  
 Geochemistry Division  
 Chemistry Department  
 University of Maryland  
 Chemistry Building  
 College Park, Maryland 20742  
 (301) 454-4413  
 B-8, C-1, C-3, D-1, D-2, D-3, D-7, D-8, E-2, E-3  
 --Geochemistry of marine and estuarine sediments and associated fluids; including the chemical nature and bonding character of metals in or on clay minerals and organics, the formation and alteration of mineral phases in the Bay sediments, particularly  $\text{FeS} \rightarrow \text{FeS}_2$ , the dispersal patterns of elements and sediments in the Bay watershed and the application of electron microprobe analysis and electron spectrometry to the study of estuarine sediments and suspended particulate material
- \* 538 Sorokin, Constantine A. PhD  
 Research Professor  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3821 ext. 38  
 B-1, B-16, High temperature algae  
 --Physiology and biochemistry of phytoplankton, specifically temperature characteristics of phytoplankton and its performance at elevated temperatures
- 539 Soukup, Michael A. MS  
 Lecturer  
 Department of Zoology  
 University of Massachusetts  
 Amherst, Massachusetts 01002  
 (617) 253-5136  
 B-12, B-18, C-3  
 --Silica budgets for estuaries, especially the effects of a decrease in silica concentration  
 --Life-histories of estuarine snails
- \* 540 Southwick, Charles H. PhD  
 Professor  
 Department of Pathobiology  
 The Johns Hopkins University  
 615 North Wolfe Street  
 Baltimore, Maryland 21205  
 (301) 955-3604

B-6, B-8, B-19

--Systematics and ecology of Eurasian watermilfoil (Myriophyllum spicatum) and other submerged vascular plants in Chesapeake Bay; including studies of water quality and other ecological conditions such as factors inhibiting or promoting the growth of aquatic vegetation, documentation of seasonal and annual fluctuations in the abundance and distribution of these species and net productivity studies

\*541 Speir, Harley Joseph MS  
Biologist II  
Maryland Department of Natural Resources  
Fish and Wildlife Administration  
State Office Building  
Annapolis, Maryland 21401

B-9, E-1, H-2

--Fisheries biology; including determination of anadromous fish associated with wetlands; their seasonal variability of occurrence; estimation of their standing crop; their relationships with wetland dependent competitors, predators, and forage species; and their association with the chemical and physical characteristics of the wetland aquatic habitat

--Baseline study of the chemical and physical characteristics of the wetland aquatic habitat

\*542 Sprague, Victor PhD  
Research Professor  
Natural Resources Institute  
University of Maryland  
P.O. Box 38  
Solomons, Maryland 20688  
(301) 326-4281

B-12, B-15, G-6, Invertebrate pathology, Protozoology

--Taxonomy, morphology, life cycle, and host-parasite relations of protozoan parasites of estuarine animals, especially of the Microsporidia and Haplosporidia in decapods and bivalve molluscs

\*543 St. Pierre, Richard Alan MS  
Assistant Marine Scientist  
Department of Ichthyology  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 64

B-5, B-9, B-18

--Fisheries biology; including population dynamics, life history studies, and larval fish culture

and maintenance  
--Productivity analyses  
--Plankton identification and enumeration

\*544 Staley, Thomas Edwin PhD  
Post-Doctoral Research Fellow  
Biology Department  
Georgetown University  
37th and O Streets N.W.  
Washington, D.C. 20007  
(202) 625-4126

B-13

--Analysis of polynucleotide sequence relationships  
among strains of Vibrio parahaemolyticus from  
various areas of Chesapeake Bay and genetic  
comparisons of these strains with ones causing  
human infections in Japan and in Cambridge, Maryland

545 Steenis, John Holt BS  
Consultant Biologist  
RFD 2, Box 118  
Warren, Maine 04864

B-6, B-8, B-14, B-19

--Ecological investigations on submersed vegetation  
to determine how to improve and manage it not  
only for waterfowl feeding but also for preservation  
of biotic balance

546 Stenger, John R. MA  
President  
Environmental Education and Protection  
126 Gills Neck Road  
Lewes, Delaware 19958  
(301) 645-8354

B-1, B-6, B-11, D-1, E-1, E-3, G-6, H-2

547 Stenzel, Henryk Bronislaw PhD  
Consulting Professor  
Geology Department  
Louisiana State University  
Baton Rouge, Louisiana 70803  
(504) 388-2131

B-9, B-12, Paleontology, Phylogeny  
--Taxonomy and phylogeny of oysters

- 548 Stibult, Kenneth Allan MSME  
 Assistant Professor  
 Ocean Engineering Technology  
 Anne Arundel Community College  
 101 College Parkway  
 Arnold, Maryland 21012  
 (301) 647-7100 ext.273  
 A-2, E-2, G-6  
 --Program development to train research assistants  
 in marine biology
- 549 Stieber, Michael Thomas MS  
 Graduate Teaching Assistant  
 Botany Department  
 University of Maryland  
 College Park, Maryland 20742  
 (202) 454-3812  
 B-6  
 --Taxonomy of vascular plants of Anne Arundel County,  
 Maryland, especially that of the grasses (Gramineae)
- 550 Stolworthy, Edward Howard BS  
 Professor Emeritus  
 Engineering Design and Analysis Laboratory  
 University of New Hampshire  
 Durham, New Hampshire 03824  
 (607) 862-1356  
 A-2, B-2, Underwater research habitat studies
- 551 Strathmann, Richard R. PhD  
 Assistant Professor  
 Zoology Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-5450  
 B-1, B-8, B-12, B-17  
 --Invertebrate biology; including studies of life  
 cycles and of larval biology and ecology of filter  
 feeders
- \*552 Sulkin, Shelley Turpin BS  
 Faculty Research Assistant  
 Environmental Research  
 University of Maryland  
 Chesapeake Biological Laboratory  
 Solomons, Maryland 20688  
 B-1, B-8, B-12  
 --Determination of primary productivity in Chesapeake  
 Bay waters surrounding a nuclear power plant  
 --Nutrient analysis of sea water in a closed ecosystem

\* 553 Sulkin, Stephen David PhD

Research Assistant Professor  
Natural Resources Institute  
University of Maryland  
Chesapeake Biological Laboratory  
Solomons, Maryland 20688  
(301) 326-4281 ext. 66

B-8, B-9, B-12

--Population dynamics of Callinectes sapidus in the Chesapeake Bay; including studies of abundance of various size-classes in order to develop a predictive model of the future commercial catch, of the influence of temperature and diet upon the reproductive potential of adults, and of the influence of natural diets upon the survival and growth of larvae

\* 554 Sullivan, Kevin J. PhD

Assistant Director  
Chesapeake Bay Center for Environmental Studies  
Smithsonian Institution  
Route 4, Box 622  
Edgewater, Maryland 21037  
(301) 798-4424

H-1, H-2, H-3

--Land-use planning studies  
--Public participation studies  
--Research in decision-making processes

555 Suydam, Ervin Lynn EdSp

Instructor  
Marine Science Department  
Rappahannock Community College  
Glenns, Virginia 23149

A-1, B-9, B-15, G-6

--Studies of fish gill parasites, especially of monogenetic trematodes  
--Marine science curriculum

556 Swan, Emery F. PhD

Professor  
Zoology Department  
University of New Hampshire  
Spaulding Building  
Durham, New Hampshire 03824  
(603) 862-2100

B-1, B-12

--Growth and variation of sea urchins  
--Environmental effects on spicules of calcareous sponges



- \* 557 Swartz, Richard Carlyle PhD  
Associate Marine Scientist  
Department of Ecology Pollution  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext.28  
B-1, B-12, Ethology  
--Ethology and ecology of aquatic animals, especially  
estuarine mud crabs (Xanthidae, Brachyura)
- \* 558 Swift, Donald J.P. --  
Research Oceanographer  
Atlantic Oceanography and Meteorology Laboratory  
NOAA  
901 S. Miami Avenue  
Miami, Florida 33130  
(305) 350-4195  
D-1, D-8  
--Sedimentation at the Chesapeake Bay mouth and  
adjoining continental shelf
- 559 Swift, Dorothy G. MA  
Graduate Student  
The Johns Hopkins University  
Earth and Planetary Sciences Department  
Graduate School of Oceanography  
University of Rhode Island  
Kingston, Rhode Island 02881  
(401) 792-6173  
B-6, B-17, E-2  
--Nutritional studies, with emphasis on vitamin  
metabolism, of marine diatoms of the genera  
Thalassiosira and Chaetoceros, isolated from  
the Gulf of Maine
- 560 Szekiolda, Karl Heinz PhD  
Assistant Professor  
Chemical Oceanography  
University of Delaware  
Newark, Delaware  
(302) 738-1212  
C-2, C-3, C-4  
--Accumulation of surfactive compounds in ocean fronts  
--Analysis of surface aggregates (films, foam) for  
inorganic and organic compounds

- 561 Tagatz, Marlin Eugene BS  
 Fishery Research Biologist  
 Gulf Breeze Laboratory  
 Environmental Protection Agency  
 Sabine Island  
 Gulf Breeze, Florida 32561  
 (904) 932-5326  
 B-5, B-8, E-3  
 --Effect of pesticides on experimental ecosystems  
 --Biology of the blue crab, menhaden, and anadromous fish  
 --Survey of estuarine fishes
- 562 Taylor, Jonathan E. PhD  
 Assistant Professor  
 College of Marine Studies  
 University of Delaware  
 Newark, Delaware 19711  
 (302) 738-1212  
 B-6, B-19, Systems ecology  
 --Ecology and physiology of benthic algae  
 --Ecology of marine "grasses"  
 --Primary productivity of phytoplankton and benthic algae  
 --Systems ecology of estuaries and lagoons
- \*563 Ten Broeck, Craig William MS  
 Natural Resources Planner  
 Planning and Evaluation Section  
 Maryland Department of Natural Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5767  
 B-8, H-2, H-3  
 --Program design for the coastal zone management program of Maryland  
 --Creation of recreational access to the Chesapeake Bay
- 564 Tenore, Kenneth Robert PhD  
 Postdoctoral Investigator  
 Biology Department  
 Woods Hole Oceanographic Institution  
 Woods Hole, Massachusetts 02543  
 (617) 548-1400 ext. 301  
 B-2, B-8, G-6, Benthic ecology  
 --Macrobenthic community studies  
 --Relationship of community structure to function (energetics)  
 --Determination of detrital food chains of deposit feeding benthos

565 Terrell, Charles Richard --  
Assistant Professor  
Biology Department  
Salem-State College  
Lafayette Street  
Salem, Massachusetts 01970  
(617) 745-0556 ext.376  
B-1, B-8

566 Thayer, Gordon Wallace PhD  
Fishery Biologist Project Leader  
Department of Commerce  
NMFS  
Atlantic Estuarine Fisheries Center  
Pivers Island  
Beaufort, North Carolina 28516  
(919) 728-4595 ext.45

B-8, B-12, B-17

- Nutrient limiting factors and the influence of detritus on the competition between phytoplankton and bacteria for nutrients
- Phytoplankton and algal production
- Energy content of estuarine organisms
- Energetics of benthic invertebrate populations and energy flow in benthic and seagrass communities
- Influence of temperature changes on metabolism, survival, and energetics of benthos and of plankton

567 Thomas, David Laurence PhD  
Project Leader  
New Jersey Marine Ecological Study  
Ichthological Associates  
West Brook Lane  
Box 70 D RD 2  
Absecon, New Jersey 08201  
(609) 646-8366

B-1, B-5, B-8

- Fisheries biology; including the ecology and early life history studies of the drums (Sciaenidae) in the lower Delaware River
- Broad ecological study in conjunction with a proposed offshore nuclear generating station

\*568 Thompson, Jesse C. Jr. PhD  
Chairman  
Biology Department  
Roanoke College  
Salem, Virginia 24153  
(703) 389-2351 ext.271

Protozoology

- Taxonomy and morphology of ciliated Protozoa

- 569 Thurberg, Frederick P. PhD  
 Research Physiologist  
 NOAA  
 National Marine Fisheries Service  
 Rogers Avenue  
 Milford, Connecticut 06460  
 (203) 878-2459  
 B-12, B-16, E-3  
 --Effects of marine contaminants on oxygen consumption  
 and osmoregulation of crustaceans and molluscs  
 --Physiology of marine biotoxins
- 570 Tietjen, John H. PhD  
 Associate Professor  
 Biology Department  
 City College of New York  
 Convent Avenue at 138 Street  
 New York, New York 10031  
 (212) 621-2549  
 B-8  
 --Physiological ecology of estuarine meiofauna, especially  
 of free-living nematodes
- 571 Tiller, Richard Edward PhD  
 Associate Professor  
 Biology Department  
 Charles County Community College  
 Box 910  
 Mitchell Road  
 LaPlata, Maryland 20646  
 (301) 934-2251 ext.77  
 B-8, B-18, B-19, C-7, C-9, E-1, E-3, F-6, G-6, H-2  
 --Conducting two-year training curriculum for estuarine  
 research technicians
- 572 Tischler, Herbert PhD  
 Professor and Chairman  
 Earth Sciences Department  
 University of New Hampshire  
 James Hall  
 Durham, New Hampshire 03824  
 (603) 862-1718  
 B-12, B-13, E-3  
 --Benthic Foraminifera in Great Bay, New Hampshire
- 573 Truitt, Reginald VanTrump PhD  
 Founder and Director  
 Chesapeake Biological Laboratory  
 Maryland Department of Research and Education  
 State of Maryland  
 Solomons, Maryland 20688

A-1, B-5, B-9, H-2  
--Molluscan and crustacean studies

\*574 Tubiash, Haskell Solomon MS  
Research Microbiologist  
National Oceanic Atmospheric Agency  
National Marine Fisheries Service  
Biological Laboratory  
Oxford, Maryland 21654  
(301) 226-5193

B-8, B-13, E-3  
--Microbiology; including the role of microorganisms in  
animal diseases and the effect of V. parahemolyticus  
and other vibrios on recruitment of commercial  
mollusks and crustaceans

575 Turegeon, Kenneth Wayne MA  
Teaching Assistant and Instructor  
Zoology Department  
University of New Hampshire  
Spaulding Life Science Building  
Durham, New Hampshire 03824  
(607) 862-2175

B-1, B-8, B-16  
--Comparative study of osmotic adjustment mechanisms  
between two populations of marine, prosobranch  
gastropods (Urosalpinx)  
--Physiological responses of marine invertebrates to  
environmental stress conditions  
--Possible existence of molluscan pheromones  
--Supplemental feeding of oysters with carbohydrates

\*576 Uhler, Francis Morey BA  
Biologist (Semi-retired)  
Patuxent Wildlife Research Center  
USDI  
Bureau of Sport Fisheries and Wildlife  
Laurel, Maryland 20810

B-6, B-8, B-12, B-14  
--Factors affecting the waterfowl feeding grounds  
along the Chesapeake Bay and its tributaries

\*577 Ukeles, Ravenna PhD  
Research Microbiologist  
Algal Studies  
National Marine Fisheries Service  
Milford, Connecticut 06460  
(203) 878-2459

A-4, B-1, B-2, B-8, B-13, B-17, C-2, C-8, E-3, G-2  
--Nutrition and physiology of estuarine micro-algae  
and Protozoan species and feeding processes  
in larval invertebrates

- \* 578 Ulanowicz, Robert Edward                      PhD  
       Research Assistant Professor  
       Natural Resources Institute  
       University of Maryland  
       P.O. Box 38  
       Solomons, Maryland 20688  
       (301) 326-4281 ext. 73  
       B-18, C-4, G-5  
       --Ecosystems modeling; including modeling of the  
       population dynamics of the producer and herbivore  
       components of estuarine planktonic systems  
       --Prototype data acquisition of tidal currents and  
       salinities in Chesapeake Bay
- \* 579 Ustach, Joseph F.                              MS  
       Faculty Research Assistant  
       Natural Resources Institute  
       University of Maryland  
       Box 38  
       Solomons, Maryland 20688  
       (301) 326-4281 ext. 44  
       B-1, B-8, B-17  
       --Detritus and associated organisms and their role  
       in trophic structure
- 580 Vagenas, George                                  MS  
       Professor of Botany  
       Biology Department  
       North Shore Community College  
       3 Essex  
       Beverly, Massachusetts 01915  
       (617) 927-4850  
       B-6, E-3, G-2  
       --Salt marsh research in Massachusetts; including  
       flora, fauna, chemical composition and human  
       history studies
- 581 Valiulis, George A.                              MS  
       Research Assistant  
       Department of Oyster Culture Zoology  
       Rutgers University  
       New Brunswick, New Jersey 08903  
       B-8, B-12, B-15  
       --Shellfish pathology; including disease resistance  
       of oysters

- \* 582 Van Engel, Willard A. PhD  
 Senior Marine Scientist  
 Department of Crustaceology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 B-1, B-8, B-9  
 --Blue Crab biology; including estimations of mortality rates, growth rates and recruitment rates; studies of migration, and predictions of the commercial catch in Chesapeake Bay and its tributaries  
 --Identification and estimation of numbers of small-sized crustacean plankton found in open waters of Chesapeake Bay and over continental shelf waters  
 --Ecological studies on mud crabs, with special reference to the effects of parasitism by sacculinids  
 --Study of methods for rearing crustaceans in the laboratory
- \* 583 Van Valkenburg, Shirley Dawn PhD  
 Assistant Professor  
 Botany Department and Chesapeake Biological Laboratory  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3821  
 B-1, B-6, B-17, Phytoplankton taxonomy and culture, Ultrastructure of chrysophytes  
 --Micro-flagellate phytoplankton studies, especially of Chrysophyta
- \* 584 Vaughn, Moses W. PhD  
 Professor of Food Technology  
 Agriculture Department  
 University of Maryland Eastern Shore  
 Box 1048  
 Princess Anne, Maryland 21853  
 (317) 651-2200  
 B-8, C-9, E-1, E-3, G-6  
 --Studies of nitrogen partitions in fishmeals  
 --Determinations of microorganisms in fishery products preserved with ionizing radiations  
 --Studies of the significance of the bacterial flora in bottom muds  
 --Washing shell stock and handling shucked oysters to bacterial quality  
 --Microwave opening of oysters and commercial processing operations

- 585 Verber, James Leonard MS  
 Captain  
 Northeast Technical Service Unit  
 HEW-PHS  
 FDA  
 CBC Building S-26  
 Davisville, Rhode Island 02854  
 (401) 267-2307  
 E-2, E-3, F-6  
 --Pollution studies, especially on shellfish
- 586 Vernberg, F. John PhD  
 Professor and Director  
 Baruch Institute  
 University of South Carolina  
 Columbia, South Carolina 29208  
 (803) 777-5288  
 B-1, B-8, B-16  
 --Studies of interaction of environmental factors  
 and functional response of animals  
 --Physiological ecology
- 587 Vernberg, Winona B. --  
 Research Professor  
 Baruch Coastal Research Institute  
 University of South Carolina  
 Columbia, South Carolina 29208  
 (803) 777-5288  
 B-8, B-16, E-3  
 --Synergistic effects of mercury and environmental  
 factors on the survival, metabolism and behavior  
 of all stages in the life cycle of the fiddler  
 crab, Uca pugilator  
 --Effects of water exposed to sediments from the  
 Charlestown Harbor area on larval zooplankton
- \*588 Villa, Orterio BS  
 Chemist, Chief Development Laboratory  
 Annapolis Field Office  
 Environmental Protection Agency  
 Annapolis Science Center  
 Annapolis, Maryland 21401  
 (301) 268-5038 ext.29  
 C-1, C-9, E-3  
 --Nutrient chemistry of estuaries  
 --Sources, cycles and sinks of macro-and micro-nutrients  
 and their effects on the biota
- 589 Walker, Earl Tagg BA  
 Staff Officer, Coastal Affairs  
 Division of River Basin Studies  
 Bureau of Sport Fisheries and Wildlife  
 Department of the Interior  
 Washington, D.C.  
 G-2, H-2, Resource protection



--Protection of the estuarine habitat from the effects of navigation channel formations, nuclear power plants, and of dredge and fill projects

590 Wall, William James Jr. PhD  
Professor  
Biology Department  
Bridgewater State College  
Bridgewater, Massachusetts 02324  
(617) 697-6167 ext. 317

B-8, B-12, C-7, Entomology

--Direct and indirect effects of pesticides on intertidal organisms

--Identification of invertebrates, particularly insects, associated with bloodsucking Diptera in intertidal areas

--Control of blood sucking Diptera breeding in intertidal areas, particularly of Tabanus spp.

591 Waller, Richard A. MS  
Fish and Wildlife Administrator  
Office of Environmental Quality  
Bureau of Sport Fisheries and Wildlife  
Department of the Interior  
Washington, D.C. 20240  
(202) 343-6913

B-1, B-8, B-12, C-4, C-9, D-8, E-1, E-2, E-3, H-2, H-3, Power plant siting

592 Waller, Thomas Richard PhD  
Associate Curator  
Department of Paleobiology  
Smithsonian Institution  
Washington, D.C. 20560  
(202) 381-5370

B-4, B-12, Paleontology

--Evolution, living habits, functional morphology, and systematics of molluscs, particularly the family Pectinidae

593 Wang, Johnson C.S. PhD  
Senior Research Biologist  
Ichthyological Associates  
P.O. Box 35, RD 2  
Middletown, Delaware 19709  
(302) 378-8877

B-1, B-2, B-5, B-8, B-9, B-13, B-20

--Fisheries biology on adults, larvae and eggs; including distribution, quick thermal changes on larvae and effects of suspended sediments on eggs, especially in the Chesapeake and Delaware Canal region

- \* 594 Ward, Fraser Prescott VMD  
 Chief, Ecological Research Program  
 Biomedical Laboratory  
 United States Army  
 Edgewood Arsenal, Maryland 21010  
 (301) 671-2586  
 B-8, B-20, Wildlife diseases  
 --Measurements of the environmental impact of research  
 and developmental activities at Edgewood  
 Arsenal on estuarine ecosystems
- \* 595 Warinner, Junius Ernest MA  
 Assistant Marine Scientist  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.30  
 B-19, E-3, F-6  
 --Primary productivity studies, with particular interest  
 in the red water bloom phenomena, its initiation,  
 propagation, and demise  
 --Studies of thermal effects and power plant siting  
 criteria
- 596 Warlen, Stanley Milfred MS  
 Fishery Biologist  
 U.S. Department of Commerce  
 National Marine Fisheries Service  
 Pivers Island  
 Beaufort, North Carolina 28516  
 (919) 728-4595  
 B-5, B-8, C-7  
 --Fisheries biology  
 --Estuarine ecology  
 --Pollution biology; including pesticide and insecticide  
 effects on estuarine organisms, especially  
 studies on the accumulation of organochlorine  
 insecticides by Atlantic menhaden during their  
 estuarine existence (first year) in Newport  
 River, North Carolina, particularly measuring  
 uptake and loss rates of C<sup>14</sup>-pp DDT by larval  
 and juvenile menhaden and monitoring levels of  
 certain insecticides in plankton, sediments,  
 and filtered water
- \* 597 Warneke, Mary Linton BA  
 Faculty Research Assistant  
 Chesapeake Biological Laboratory  
 University of Maryland  
 Box 212, Route 2-4  
 Solomons Island, Maryland 20688  
 (301) 326-3446

B-8, C-1, E-3

--Bay ecology, especially of chemical factors involved in pollution

\* 598 Wass, Marvin L.

PhD

Associate Marine Scientist  
Biological Oceanography  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 83

B-8, B-12, Wetlands

--Studies of benthic invertebrates; including determinations of macroinvertebrate infauna of dredged areas, of bottoms enriched by sewage, of inshore continental shelf communities, and of eel grass beds, and of epifauna of Zostera and Sargassum; ecology of gammarid amphipods, of Rangia and chaetognaths; systematics of Bittium; life history study of Rangia; and reproductive biology of Littorina

--Wetlands research

599 Watling, Lee E.

MS

Resident Biologist  
College of Marine Studies  
University of Delaware  
P.O. Drawer 286  
Lewes, Delaware 19958  
(302) 645-8489

B-4, B-8, B-12

--Benthic ecology

--Taxonomy and ecology of benthic invertebrates in Delaware Bay and in the coastal lagoons of this state

600 Watson, George Elder

PhD

Chairman  
Department of Vertebrate Zoology  
Smithsonian Institution  
National Museum of Natural History  
Washington, D.C. 20560  
(202) 381-6127

B-14

--Distribution and ecology of marine birds in relation to environmental factors

- 601 Webb, Kenneth Louis PhD  
Associate Marine Scientist  
Department of Environmental Physiology  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext.34  
B-8, B-16, C-2  
--Studies of dissolved organic compounds and their  
flux, especially of nitrogenous compounds;  
including aspects of the nitrogen cycle in  
relation to the plankton community
- 602 Webber, Edgar Ernest PhD  
Associate Professor  
Biology Department  
Keuka College  
Keuka Park, New York 14478  
B-6, B-8  
--Systematics, ecology, and life history studies of  
benthic algae of salt marshes
- \*603 Weck, Susan Gale MA  
Botanist  
Chesapeake Bay Center for Environmental Studies  
Smithsonian Institution  
Box 622 Route 4  
Edgewater, Maryland 21037  
(301) 798-4424  
E-1, G-1, Remote sensing  
--Environmental monitoring and data collecting using  
remote sensing and other aerial techniques
- 604 Wentzell, Paul Clifford --  
Lieutenant  
Maryland State Marine Police  
Maryland Department of Natural Resources  
State of Maryland  
Annapolis, Maryland 21404  
(301) 267-5181  
A-1, H-2, Marine and conservation law enforcement  
--Marine conservation, especially of fin fish, crabs,  
oysters, clams, soft shell clams and terrapins
- 605 Whaley, Horace Henry BS  
Marine Superintendent  
Chesapeake Bay Institute  
The Johns Hopkins University  
Baltimore, Maryland 21218  
(301) 268-5231

- \*606 Whaley, Richard Charles MA  
Associate Research Scientist  
Oceanography Department  
The Johns Hopkins University  
Charles and 34th Streets  
Baltimore, Maryland  
(301) 268-5231  
A-2, B-8, B-17, B-19, C-4, C-9, D-8, E-2  
--Plankton ecology
- \*607 Wheaton, Frederick Warner PhD  
Research Associate  
Agricultural Engineering Department  
University of Maryland  
College Park, Maryland 20742  
(301) 454-3901  
A-2, B-2, F-4  
--Engineering research in the seafood industry; including  
developing a technique and the necessary equipment  
to mechanize oyster shucking of Chesapeake Bay  
oysters  
--Development of closed cycle systems for raising  
aquatic organisms; including growing oysters  
fed with a non-algal food
- 608 Wheeler, Ellsworth H. PhD  
Assistant Professor  
Zoology Department  
University of New Hampshire  
Durham, New Hampshire 03824  
(603) 862-2112  
B-17, B-18, E-2, Deep sea biological oceanography  
--Estuarine zooplankton, particularly of Copepoda,  
including systematics and general ecology
- \*609 Wheeler, Richard Hoelzen BS  
Biologist  
Wetlands Division  
Department of Natural Resources  
State Office Building  
Annapolis, Maryland 21401  
(301) 267-5774  
B-6, B-8, Wetlands ecology  
--Studies on the tidal wetlands in Maryland; including  
the geographical distribution of vascular plants,  
especially in relation to salinity; the amount  
of tidal inundation and soil texture; and the  
ecological effects of spoil disposal

- \*610 Whitcomb, James Paul BA  
 Assistant Biologist  
 Department of Applied Biology  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext.85  
 B-1, G-7  
 --General clam survey
- \*611 White, John Conner Jr. MS  
 Chief Biologist  
 Environmental Control  
 Virginia Electric and Power Co.  
 P.O. Box 26666  
 Richmond, Virginia 23621  
 (703) 771-3389  
 B-8, E-1, H-3  
 --To insure an adequate power supply with a minimum  
 of environmental impact
- \*612 Wiemeyer, Stanley N. MS  
 Research Biologist  
 Department of the Interior  
 Bureau of Sport Fisheries and Wildlife  
 Patuxent Wildlife Research Center  
 Laurel, Maryland 20810  
 (301) 776-4880 ext. 261  
 B-14, B-18, E-3  
 --Population trends and reproductive success of  
 ospreys on a tidal portion of the Potomac River,  
 including possible effects of environmental  
 pollutants  
 --Bald eagle populations and reproductive success in  
 the Chesapeake Bay area; including determination  
 of the levels of environmental pollutants in them  
 with relation to their reproductive success
- 613 Wilcox, Churchill Klages MS  
 Teaching Assistant  
 General Education Department  
 Harvard University  
 Cambridge, Massachusetts 02138  
 and  
 Lecturer  
 Civil Engineering Department  
 Tufts University  
 Medford, Maine 02155  
 G-5, G-6, Gas exchange across air-sea interface  
 --Construction of a simulation model of the carbon  
 dioxide balance among the atmosphere, ocean  
 and biosphere in order to investigate the  
 effects of increasing concentrations of carbon  
 dioxide on the world climate

614 Wilcox, J. Ross PhD

Instructor  
Graduate School of Oceanography  
University of Rhode Island  
Kingston, Rhode Island 02881  
(401) 792-6281

B-1, B-8, B-12

--Biology and feeding habits of the sand shrimp,  
Crangon septemspinosa

\*615 Wiley, Cloyde William Jr. BA

Director  
Bureau of Shellfish Sanitation  
Virginia State Health Department  
109 Governor Street  
Richmond, Virginia 23219  
(703) 770-6277

B-10, C-9, E-1

--Administration in the state shellfish sanitation  
control program

\*616 Wiley, Martin Lee PhD

Research Assistant Professor  
Natural Resources Institute  
University of Maryland  
Box 38  
Solomons, Maryland 20688  
(301) 326-4281

B-5, B-8, B-9

--Fisheries biology and ecology

617 Wilk, Stuart J. BS

Fishery Biologist (Research)  
National Marine Fishery Service  
Sandy Hook Marine Laboratory  
Fort Hancock  
Highlands, New Jersey 07732  
(201) 872-0200 ext. 34

B-5, B-9, B-18

--Fisheries biology; including the distribution, age,  
growth, population characteristics, food habits,  
and states of maturity of the following sciaenid  
species: weakfish, Atlantic croaker, spot and  
Northern and Southern kingfish; the morphometric and  
meristic analysis of the following species to  
define stocks and/or races: summer flounder,  
Gulf flounder, Southern flounder, and bluefish;  
and the continuation of an ongoing survey of  
coastal fishes

- 618 Wilkens, E. Peter H. BS  
 Fishery Biologist  
 National Marine Fishery Service  
 S.E. Fishery Center  
 75 Virginia Beach Drive  
 Miami, Florida 33149  
 (308) 361-5761  
 B-5, B-9, B-17  
 --Fisheries biology; including abundance, distribution  
 and early life history studies
- \* 619 Williams, Arthur Hilton MS  
 Anadromous Project Leader  
 Fisheries Division  
 Louisiana Wildlife and Fisheries Commission  
 P.O. Box 426  
 Ferriday, Louisiana 71334  
 (318) 757-4571  
 B-9  
 --Fisheries biology; including investigations of the  
 striped bass which are native to the Chesapeake  
 Bay and how they differ from more southerly races
- \* 620 Williams, Austin B. PhD  
 Systematic Zoologist  
 Systematics Laboratory  
 Department of Commerce  
 NMFS  
 U.S. National Museum  
 Washington, D.C. 20560  
 (202) 381-5923  
 B-8, B-12, Systematics of decapod crustaceans  
 --Systematics and ecology of decapod crustaceans  
 --Temporary plankton of estuaries
- 621 Williams, David Harry MS  
 Instructor in Biology  
 Science Department  
 Anne Arundel Community College  
 101 College Parkway  
 Arnold, Maryland 21012  
 (301) 647-7100 ext. 320  
 B-8, B-18, E-3  
 --Plankton sampling and analysis  
 --Benthic invertebrates  
 --Fisheries biology  
 --Animal behavior



- \*622 Williams, Jerome MA  
Associate Professor  
Environmental Sciences Department  
U.S. Naval Academy  
Annapolis, Maryland 21402  
(301) 267-3561  
A-2, F-1, F-5, G-6  
--Optical properties of estuarine waters  
--Instrumentation  
--Estuarine dynamics
- 623 Willims, Richard Birge PhD  
Leader Estuarine Energetics Program  
Atlantic Estuarine Fisheries Center  
National Marine Fisheries Service  
Beaufort, North Carolina 28516  
(919) 728-4595  
B-8, B-17, B-19, G-5
- 624 Willingham, Charles Allen PhD  
Senior Marine Biologist  
Marine Sciences Department  
Wm. F. Clapp Laboratory of Battelle  
Washington Street  
P.O. Box 1637  
Duxbury, Massachusetts 02332  
(617) 934-5684  
B-8, B-13, E-3  
--Ecology of estuarine areas as it pertains to dredge-  
fill activities and thermal additions from power  
plants  
--Microbial ecology of submerged surfaces of the mud/water  
interface
- \*625 Wilson, Woodrow Lee NS  
Laboratory Specialist  
Department of Ichthyology  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 64  
A-1, B-9, B-18  
--Fisheries biology, especially of anadromous fishes
- 626 Windsor, John Golay Jr. MA  
Research Assistant  
Department of Geochemical Oceanography  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 78  
C-1, C-6, C-7  
--Air-sea and sea-bottom interactions

- \*627 Winn, Paul Norfleet MS  
 Research Professor  
 Agricultural Engineering Department  
 University of Maryland  
 College Park, Maryland 20742  
 (301) 454-3901  
 A-2, B-2, E-3  
 --Fisheries biology; including studies of the physical parameters of temperature, water quality, feed disease control, light, stocking density and waste disposal required for the extended operation of a closed cycle system for optimum production of fin fish
- 628 Wiper, Harold A. MS  
 Science Teacher  
 Science Department  
 Newton High School  
 Palmer House  
 Walnut Street  
 Newtonville, Massachusetts 02160  
 (617) 969-9810 ext. 225  
 B-1, E-2, G-6
- \*629 Wojcik, Frank John MS  
 Assistant Marine Scientist  
 Department of Statistics and Data Processing  
 Virginia Institution of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111  
 B-9, B-12, G-1  
 --Data processing and data analysis  
 --Life history of the blue crab  
 --Life history of the Alaskan grayling
- 630 Wolfe, Douglas Arthur PhD  
 Director, Division of Ecology  
 Atlantic Estuarine Fisheries Center  
 NOAA  
 National Marine Fisheries Service  
 Pivers Island  
 Beaufort, North Carolina 28516  
 (919) 728-4595  
 B-8, C-1, E-3  
 --Accumulation of trace elements, heavy metals and radionuclides by estuarine organisms, flux of these materials through estuarine ecosystems, and their effects upon organisms and ecosystems

- \* 631 Wood, John Langille PhD  
Associate Director  
Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062  
(703) 642-2111 ext. 41  
B-1, B-13, Administration of research  
--Administration of research, marine biology, and  
marine microbiology of Chesapeake Bay, its  
tributaries and the continental shelf
- 632 Wood, Lindsay Wallace PhD  
Postdoctoral fellow  
Department of Zoology  
University of Toronto  
25 Harbord Street  
Toronto, 5 Ontario  
Canada  
B-1, C-1, E-3  
--Role of microbes and benthos in the cycling of  
organic solutes and other nutrients at the  
sediment water interface  
--Studying both polluted systems and less polluted  
systems with regard to the controls and processes  
in order to determine the effects of enrichment  
or alternations in loading
- 633 Wood, Richard Dawson PhD  
Professor  
Botany Department  
University of Rhode Island  
Kingston, Rhode Island  
(401) 792-2161  
B-6, B-8, Aquatic plant ecology  
--Algae, both macro and micro, of estuarine water;  
including their systematics, ecology, seasonal  
periodicity, interacting associations, and  
measurable factors
- 634 Woods, William Joseph PhD  
Associate Professor  
Institute of Marine Sciences  
University of North Carolina  
P.O. Drawer 809  
Morehead City, North Carolina 28557  
(919) 726-6841  
B-8, B-17, B-19, C-4, C-8, E-2, G-6  
--Productivity  
--Nutrient cycling  
--Plankton ecology  
--Relationship between water chemistry and plant  
composition  
--Availability of primary producers as food  
--Energy flow through the food chain

- 635 Woodson, Bernard Robert Jr. PhD  
 Professor  
 Biology Department  
 Virginia State College  
 Petersburg, Virginia 23803  
 (703) 526-2868  
 B-6, B-17, B-19, C-7, E-1, G-6  
 --Algal systematics and productivity  
 --Effects of pesticidal concentrations on algal  
 development in the laboratory environment
- \*636 Worthley, Elmer George PhD  
 Biologist  
 U.S. Department of the Army  
 BioMedical Laboratory  
 Edgewood Arsenal  
 Experimental Medicine Branch  
 Edgewood Arsenal, Maryland 21010  
 (301) 671-2247  
 B-6, B-8, E-1  
 --Plant life near Edgewood Arsenal, Maryland; including  
 any effects on it that might be caused by either  
 actual or potential pollution
- 637 Wright, Richard Thomas PhD  
 Professor of Biology  
 Biology Department  
 Gordon College  
 Wenham, Massachusetts 01984  
 (617) 927-2300 ext 262  
 B-13, B-17, B-19  
 --Influence of mixing in a tidal estuary on the uptake  
 of organic solutes by planktonic and sediment  
 bacteria, and on the transformation of that organic  
 matter into new cells or into constituent minerals
- 638 Yanovitch, William Edward BS  
 Assistant Watershed Manager  
 Maryland Department of Water Resources  
 State Office Building  
 Annapolis, Maryland 21401  
 (301) 267-5677  
 B-9, C-9, E-3
- 639 Yeo, Harry William PhD  
 Principal Assistant  
 Telstar Regional High School  
 SAD 44  
 Bethel, Maine 04217  
 (207) 824-2366  
 B-6, B-17, E-3, G-6  
 --Phytoplankton speciation as it relates to water quality

- \* 640 Yorgiadis, Strati MS  
 Senior Sanitary Engineer  
 Sheppard T. Powell Associates  
 501 Saint Paul Place  
 Baltimore, Maryland 21202  
 (301) 685-3210  
 E-1, E-3, F-6, G-7, Consulting engineers  
 --Hydrographic studies and meteorological studies in  
 rivers and estuaries
- \* 641 Zaneveld, Jacques Simon PhD  
 Professor  
 Institute of Oceanography  
 Old Dominion University  
 Box 6173  
 Norfolk, Virginia 23508  
 (703) 489-8000 ext. 456  
 B-1, B-8, E-2  
 --Study of the trophic-dynamic system of the Lower  
 Chesapeake Bay; including productivity determinations  
 --Taxonomy, ecology, morphology, geographical  
 distribution, and aquaculture of benthic marine  
 seaweeds
- 642 Zottoli, Robert A. PhD  
 Associate Professor  
 Biology Department  
 Fitchburg State College  
 Fitchburg, Massachusetts 01420  
 (617) 343-6417 ext. 311  
 B-1, B-8, B-12  
 --Taxonomy of polychaetes, especially of the family  
 Ampharetidae  
 --Boring mechanism of Polydora websteri
- \* 643 Zubkoff, Paul L. PhD  
 Senior Marine Scientist and Head  
 Environmental Physiology Department  
 Virginia Institute of Marine Science  
 Gloucester Point, Virginia 23062  
 (703) 642-2111 ext 33  
 B-17, C-2, Radiobiology  
 --Application of biochemical principles and methodologies  
 for investigating various aspects of the estuarine  
 ecosystem; including studies of the phenomenon  
 of "red water" development, primary productivity  
 potential and heterotrophy of the estuarine  
 ecosystem; biochemistry of the lipids, enzymes,  
 and pigments of the jellyfishes, of the lipids  
 and pigments of phytoplankton and of the lipids  
 and proteins of zooplankton; and use of radioactive  
 tracers with plankton

\*644 Zwerner, David E.

MA

Assistant Marine Scientist

Parasitology Section

Virginia Institute of Marine Science

Gloucester Point, Virginia 23062

(703) 642-2111

B-8, B-15, Diseases of fishes

--Fisheries biology; including organisms causing fish diseases and the distribution of fish ectoparasites, especially of monogenetic trematodes and parastic copepods

**CATEGORICAL INDEX OF PERSONNEL BY  
KEYWORD RESEARCH INTERESTS**

The personnel included in this inventory have been listed in alphabetical order, and each scientist has been assigned a number. The Keyword designations for research interests were assigned letters for the general interest areas and numbers for the subdivisions within these interest areas. Thus, "B-8" indicates (B) "Biological Sciences, (8) Estuarine Ecology." The list of numbers following "B-8" refer to the scientists in the inventory who have designated "B-8" as a research interest. For example, number 5 follows "B-8" and therefore, Sidney Marshall Adams (scientist number 5 in the inventory) is interested in Estuarine Ecology.

**A     Applied (Industrial/Commercial)**

**A-1 Commercial fishing**

13, 28, 89, 92, 94, 97, 143, 148, 189, 199,  
215, 232, 236, 249, 284, 300, 308, 312, 325, 330,  
345, 349, 358, 367, 416, 417, 456, 475, 508, 513,  
521, 522, 532, 555, 573, 604, 625

**A-2 Engineering & Instrumentation**

31, 35, 52, 174, 194, 215, 272, 320, 359, 375,  
488, 498, 548, 550, 606, 607, 622, 627

**A-3 Fish Processing**

42, 105, 199, 215, 356, 416, 435

**A-4 Seaweed Extractives**

215, 344, 428, 577

**B     Biological Sciences**

**B-1 Marine Biology (general)**

7, 8, 13, 14, 19, 30, 35, 40, 48, 66,  
69, 76, 77, 82, 83, 89, 90, 91, 93, 97,  
98, 101, 105, 109, 110, 117, 121, 123, 125, 127,  
129, 132, 137, 142, 147, 155, 156, 169, 170, 171,  
172, 173, 183, 186, 187, 188, 204, 205, 211, 213,  
217, 221, 224, 232, 237, 241, 244, 248, 261, 270,  
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